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OF
FINANCIAL ANALYSTS SOCIETIES

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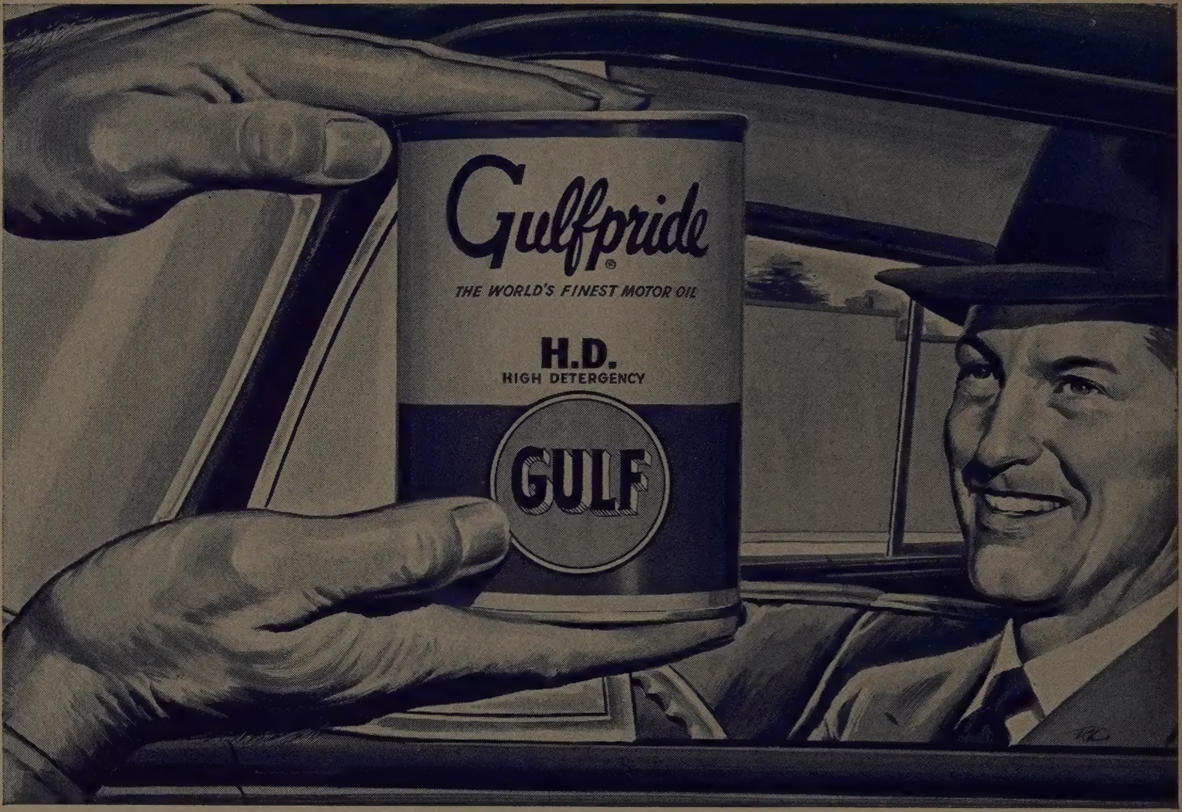

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Forecast...

Acetate yarn and fiber at present comprises the largest division in our business. Acetate is an accepted staple in the apparel industry, that market being more important to us even than the household furnishings business. Although the apparel manufacturing trades appear to have a definite cycle, only once in our experience, and this in the latter part of 1951 and the first quarter of 1952, did the declining phase of this cycle coincide with a definite style change. Consequently our sales of yarn for use in the apparel industry were unduly depressed until the middle of the second quarter of 1952.

A period of severe business depression always presents excellent opportunities to improve efficiencies, increase capacities, strengthen organization, and broaden horizons. During the past year our Company has made definite progress toward these goals. We have also widened our diversification of products and markets by the continuing expansion of our chemical and plastics divisions.

We believe that management in our industry will continue to solve its domestic business problems in a satisfactory way. Unusual opportunities are now opening for development of foreign markets. These markets also offer the advantage of profitable diversification. For that reason we are extending our business into other countries where the political and economic climate is favorable to growth and profits.

Harold Blancke
President

CELANESE CORPORATION OF AMERICA, 180 MADISON AVENUE, NEW YORK 16

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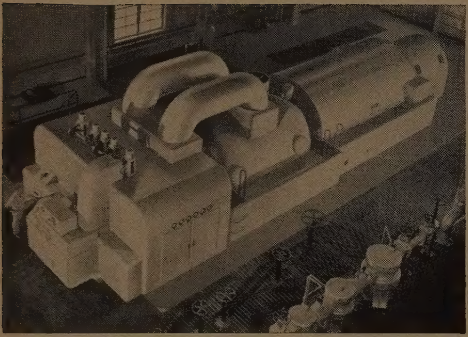
Help People Produce More — Have More —
Enjoy More Leisure Time — Live Better!

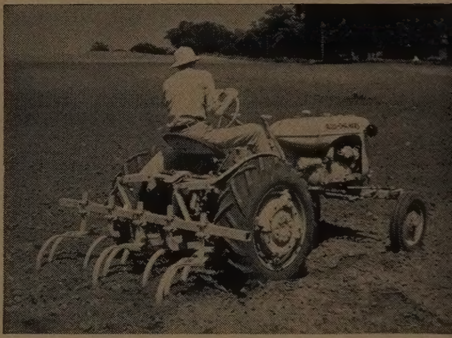


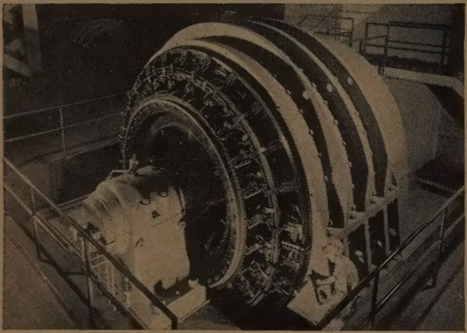
◂ Turbines

Steam and hydraulic turbines that help provide low cost light and power for homes and factories.

Tractors ▸

Wheel type and crawler type, plus implements and accessories — for agricultural and industrial use.



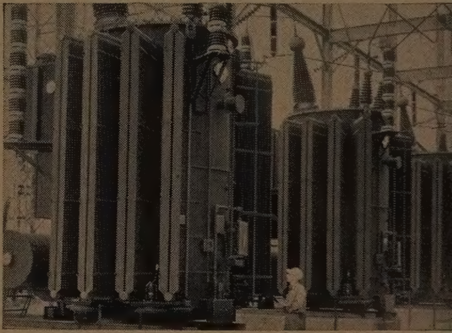


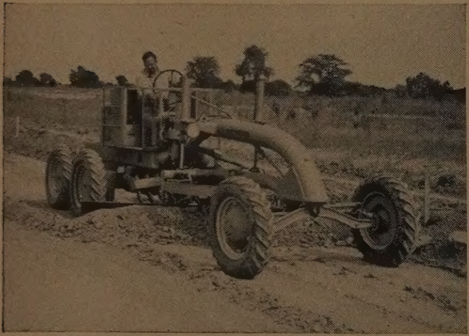
◂ Motors

1 hp up — ac and dc — along with control and switchgear, turning electric power into useful energy.

Transformers ▸

Large power transformers to small distribution type — also circuit breakers and voltage regulators.



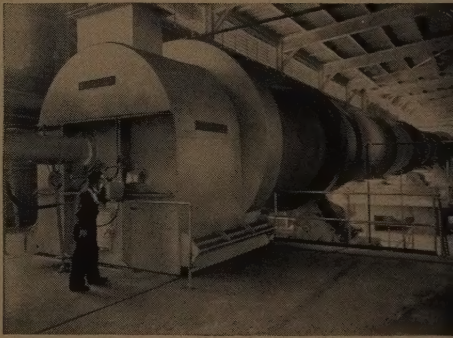


◂ Graders

Road machinery for construction, resurfacing and year-around maintenance of streets and highways.

Kilns ▸

Also crushers, screens and grinding mills for the cement, mining and rock products industries.



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Serving All Industry for More Than a Century

ALLIS-CHALMERS

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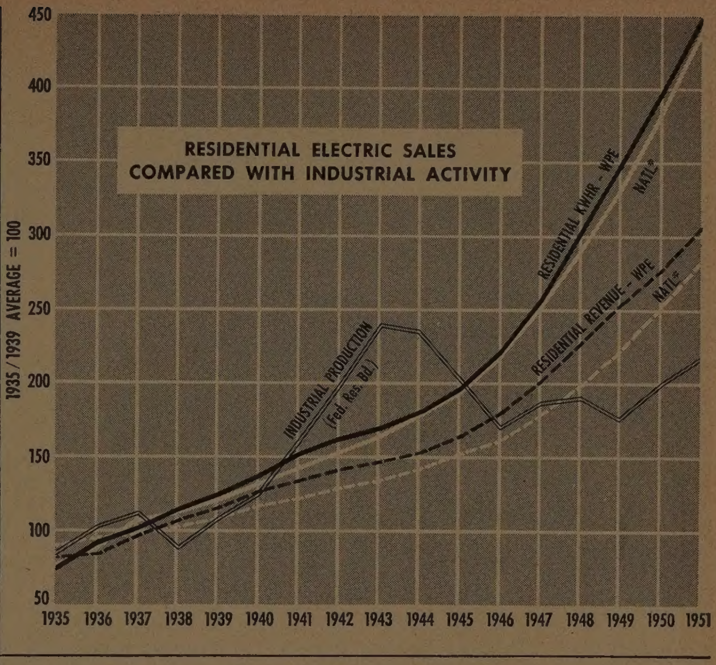
RESIDENTIAL ELECTRIC SALES
COMPARED WITH INDUSTRIAL ACTIVITY
1935 / 1939 AVERAGE = 100
450
400
350
300
250
200
150
100
50
1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951
RESIDENTIAL KWHR. - WPE
NAT'L*
RESIDENTIAL REVENUE - WPE
NAT'L*
INDUSTRIAL PRODUCTION (Fed. Res. Bd.)

Some of our best customers are People!

West Penn Electric's residential business has shown steady growth in recent years even when industrial activity was varying greatly. Despite competition from natural gas in a large part of our service area, the rate of growth of residential revenues has exceeded the rate of growth of electric sales to residential customers for the entire country, which in general is less industrial in character.

Throughout our territory of 29,000 square miles—in Pennsylvania, West Virginia, Maryland, Ohio and Virginia—the folks at home are enjoying more and more of the modern comforts which electricity makes possible. They like to live and work in West Penn Electric territory. With no big cities, it offers the advantages of friendly, small-town living. Management as well as employees—industries and individuals—enjoy this kind of business climate. We have plenty of power to serve them all.

If you would like to receive West Penn Electric's regularly published reports and other information, we'll be glad to place your name on our mailing list. Write the Company at its office, 50 Broad Street, New York 4, N. Y.

THE West Penn
Electric Company
(INCORPORATED)

* Note: "National" data computed from information in Edison Electric Institute bulletins. This information is stated to be representative of the entire electric light and power industry contributing to the public power supply of the United States . . . electric utility companies, municipal plants, rural cooperatives, and other government agencies.

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Fruehauf maintains all types of Trailers i
its modern, well equipped Service Branche

FRUEHAUF
Keeps Cargoes Rolling

FORTUNE reported, in a recent article: American Families spend more on transportation than on any other single commodity, with the possible exception of Food.

The fastest growing segment of this basic American industry — truck transport — is well served by the Fruehauf Trailer Company through its nation-wide network of Factory Service Branches.

Not only is Fruehauf the largest single builder c Truck-Trailers but also, by a substantial margin, has the most complete service facilities to insure tha the nation's cargoes keep rolling.

Years of regular dividend payments back up the fundamental soundness of Fruehauf's leadership in this segment of the transportation field.

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Trailers
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The Analysts Journal

Message from the Federation President

AUGUST
1952

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VOLUME 8
NUMBER 4

THE PRESIDENCY OF THE National Federation of Financial Analysts Societies is an office that I accept not only with sincere appreciation of your confidence but also with deep awareness of its responsibilities. One cannot help but feel very humble in reflecting on the many achievements of my predecessors—Kennard Woodworth, Lucien O. Hooper, George M. Hansen, and Pierre R. Bretey.

In the light of these brilliant leaders the Federation has reached a professional standing of high repute in only a short span of years. It will be difficult indeed to maintain such a rapid rate of progress. Nevertheless, what has been accomplished in the past is a challenge for our future. The other officers and directors of the Federation join with me in welcoming the opportunity to serve you to the utmost of our ability in promoting the welfare of the fine profession of security analysis.

If we were to single out just one of many objectives as a particular goal, it would be this: To strengthen the inherent ties between the Societies of the Federation—to build an even sturdier professional structure on a *national* basis. Time has passed well beyond sectional interests. The "autonomous" Societies may be likened to individual analysts. No two are alike, and each has attributes of great strength as well as points of weakness. The Federation stands as a mechanism whereby the ingenuity of each Society can be transmitted to the others for the common benefit. Through mutual undertakings we can surely advance in new and forward-looking directions, profiting from the accumulated wisdom gained from our experience.

The Fifth Annual Convention in California may be judged as an outstanding contribution in the broad national interests of the profession. Here were gathered over 700 representatives from all the Societies together with many others from diverse parts of the country who came, at considerable expense, to participate in the Proceedings. At the Directors' Dinner on May 4 no less than 49 Federation directors and committee heads sat down to discuss problems of mutual concern and to pass on important changes in the

(*continued on next page*)

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Constitution. Of importance too is the fact that ten of the twelve Societies were officially represented on the program, by either forum chairmen or analyst speakers. Those of us in charge of the Convention will always be grateful for the splendid support we received from each Society without exception.

Through the medium of Convention field trips and the wonderful Special Train, dozens of great industrial companies in the West and South opened the doors of their plants and storehouses of information to a broad cross section of the Nation's security analysts. In a sense no greater tribute to the profession could have been made. It was clear evidence that financial analysts have arrived at a position of national prominence and esteem.

As the stature of each Society and its individual members grows, so does the Federation. Recognition of the security analyst as a highly valued individual in all phases of finance has a natural consequence of placing greater responsibilities on the national organization. This year, for the first time, the ***Directory of Memberships*** will be an official publication of the Federation under a new committee established at the annual meeting in San Francisco. We may hope that it will be a forerunner of many distinguished publications of the Federation in the coming years.

The Federation has made its greatest strides in committee work directed toward securing adequate and reliable corporate information, a field where the combined influence of the Societies can readily be brought to bear. In other fields the individual Societies have so far carried the major load. I refer here to education and analyst training, a most vital factor with respect to our longer-range progress; to placement which brings a practical value to all members; and to the development of sound ethics and standards as guideposts of a professional organization. In all probability the important function of obtaining corporation speakers should remain essentially where it is now—in the hands and at the discretion of each Society.

The columns of THE ANALYST JOURNAL have always been open to the National Federation. The PROCEEDINGS issue is another example of the splendid co-operation and valuable support we receive from its editors. I urge you to give it careful reading. The various Federation committee reports deserve especial attention. You will note that the method of admission of new Societies has been clarified and improved. Our next major steps forward in the Federation may well be in connection with a program of education or scholarships on a national scale, a broadened scope of placement activity among the Societies, and a serious evaluation of national professional standards leading to a chartered analyst certificate along the lines now being pioneered by the New York Society. Your opinions and advice on all these matters will be most welcome.

I am very happy to report to you that the 1952 Convention in San Francisco and Los Angeles has passed an important acid test of analysis—namely a financial surplus. Now it is "On to Philadelphia in 1953" for the *Sixth* Annual Convention, April 12 through 16. There we will have a wonderful setting of vast industrial expansion in the area superimposed on a background of rich American heritage. I am sure it will command your strong support. Let us make it another opportunity to demonstrate the national solidarity of the analyst profession.

Richard W. Lambourne

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Your telephone is worth far more than it costs.

The cost of a call can be counted in pennies.

The value is often beyond measure.

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At the speakers' table, investment companies forum *(left to right)*: George K. Whitney, A. Moyer Kulp, Chairman Douglas R. Johnston, David G. McCornack, and Kennard Woodworth

George Shimmon

Investment Companies

MONDAY MORNING, MAY 5, 1952

DOUGLAS R. JOHNSTON, Commonwealth Investment Company, San Francisco, presiding.

Chairman Johnston: Gentlemen, at a convention last winter one of the panel chairmen kept reminding the audience that the speakers were highly paid men. "Listen to them," he would say. "These men come high." Well, I guess that is a form of a quantitative analysis in our occupation, but we are equally interested in qualitative analysis. I assume that our speakers measure up completely, and I hope, for their own sakes, too, that they are on a quantitative basis, but they are invited to speak to us today because of their outstanding quality.

You will be interested in knowing that this is the first forum on investment companies to be held at a National Federation Convention.

The first speaker is Mr. George K. Whitney. After college, he joined the First National Bank of Chicago, and subsequently was at work for the Hartford-Connecticut Trust Company. He went with Massachusetts Investors Trust in 1943, and is a trustee of that institution. His subject is "Investing Today for a Common Stock Fund." Mr. Whitney. *(Applause)*

* * *

George K. Whitney: It is a high honor and a great pleasure to me to be asked to participate in this annual Convention of your worthy organization. You have come a long way in five years, and I say more power to you.

In the short time allotted for this talk, I shall attempt to present the story of Massachusetts Investors Trust—its objectives and how we are trying to achieve those objectives.

THE TRUST A CONSERVATIVE MEDIUM

As our prospectus states, the Trust is believed to constitute a conservative medium for that portion of an investor's capital which he may wish to have invested principally in stocks of high investment quality. Although under our Indenture of Trust other types of securities may be purchased and held, it has been the trustees' policy to invest principally in common stocks and, to quote the prospectus, "It is their present intention to continue this policy and in general to confine new investments to common stocks of high or improving quality."

SOME FACTORS AFFECTING PROCEDURES

Before describing how this underlying policy is being implemented, it is first necessary, I believe, to mention some important factors which affect the procedures used. In the first place, it has been our history that there has been a growth in the number of shares of the Trust outstanding in each year of its existence since its beginning in 1924. In other words, there has been a more or less continuing flow of new money into the Trust. Second, in carrying out the objectives expressed in our prospectus, it has been a fundamental belief of ours that a fully invested position is required. It will be remembered that the Trust is believed to constitute a medium for that part of an investor's capital which he thinks should be invested in high-quality common stocks. To serve this function for our more than 90,000 share holders, we think a fully invested position is called for. Among these 90,000 share holders are more than 6,500 fiduciary and institutional accounts, including 100 pension and profit-sharing funds, which own about 14% of our Trust's outstanding shares. This type of share holder, particularly, is by nature a long-term holder, generally not seeking or desiring to go in and out of an invested position in common stocks with fluctuations in the stock market. Moreover, there are more than 1,600 share holders acquiring additional shares of the Trust under our so-called cumulative investment program, which was initiated two years ago. It provides a convenient method for small or large savers to acquire a stake in good-quality common stocks through regular monthly or quarterly payments over a period of years. There are also many other of our share holders acquiring additional shares from time to time who do not use the program. Investors of this sort usually are not too much concerned with stock market fluctuations.

CAPITAL GAINS MUST BE PAID OUT

Under Federal tax laws net realized capital gains must be paid out to our share holders if the Trust is to avoid a capital gains tax, and, when paid out, they constitute a return of capital and thereby result in a diminution of the proportionate amount each share holder has invested in good-quality common stocks. Furthermore, in keeping with our objectives, we do not seek to realize large amounts of capital gains other than those that may be realized in such portfolio transactions as are incidental to the carrying out of investment policy. As a result of this and because our holdings are considered to be characteristically of high quality or of improving quality and, therefore, essentially long term in nature, the rate of portfolio turnover of our Trust is below average. Examples of stocks that in the past, at least, have been considered to be of so-called improving quality are Amerada Petroleum, International Paper, American Natural Gas, Aluminum Ltd., Pfizer, the rubber stocks, and some of the railroad stocks, all of which it has paid to hold over the years, despite intermediate fluctuations in market quotations.

BLUE SKY LAWS

Then, of course, there are certain restrictions imposed on us and other investment companies generally by state "Blue Sky Laws" and the Investment Company Act of 1940, and also by our own Indenture of Trust, such as the percentage of any class of securities of a company that can be owned by the Trust, and the percentage of the total assets of the Trust that may be invested in any one company. Also, we are forbidden to invest in stocks of companies that have not been in continuous operation for at least three years.

In the light of these factors, one of the very important guiding considerations in making decisions concerning purchases and sales of stocks is that of relative attractiveness of the various types of stocks in view of the economic outlook—for example, whether to put emphasis on so-called defensive stocks or to take a more aggressive attitude. I have already mentioned the continuing flow of new money into the Trust over the years of its existence, and this factor makes the task of maintaining what is thought to be proper diversification of investments perhaps an easier one, since, by not adding to an investment, the outlook for which is thought not to be so attractive as that for some other investment, the proportion invested therein is automatically decreased. A very important guiding consideration is the maintenance of adequate, and I stress *adequate*, diversification at all times. All experienced and seasoned investors will admit, I think, that an absolutely correct foreknowledge of future events is not humanly attainable and that a good defense against such human errors is reasonable diversification of risk. Timing of purchases and sales of individual stocks is fundamentally important in the management of a portfolio such as ours.

METHODS USED IN MANAGING INVESTMENTS

A description of the methods used in managing the investments of the Trust may be of interest at this point. An attempt is made to keep our operations as simple as possible, consistent with the making of well-considered decisions. There is an absence of red tape which contributes in some measure to our well-known low ratio of operating expenses.

Fundamentally we strive for complete and full information, in the belief that, even though this will not prevent the making of mistakes, wise decisions cannot be made without it. We have a small but experienced staff of so-called industry specialists whose investigations carry them into the field to the extent of one quarter to one third of their working hours. We also call on outside sources of information of the best sort, such as corporation executives, commercial banks, and investment banking houses. A large part of our brokerage business is directed to investment dealers who perform services for us such as the provision of information and ideas. We believe an open mind toward ideas from outside sources is an essential for successful investment management and that the generation of useful ideas should be rewarded. We have an advisory board of six well-known men of important stature in business life. From sources such as this we gather our fund of information concerning general economic conditions and conditions in a particular company or industry. A considerable part of this information is, of course, confidential, and we believe it a wise business policy to keep it so.

FULL PICTURE OF OUR OPERATIONS

There are some matters of interest that probably should be mentioned in order to give you a full picture of our operations. We generally exercise in full all rights received to subscribe to additional common stock, on the theory that, if we think well enough of a given stock to hold it in the portfolio, it is desirable to subscribe. This policy of the Trust helps to provide the vitally needed new equity capital essential to the continued healthy functioning and expansion of the American economy.

It is not the policy of the Trust to invest for the purpose of exercising control or management. As an important stockholder in many companies over a period of years, we have from time to time been asked for our advice on such matters as the type of security a company might best issue for purposes of raising additional capital. In discussing this subject, I think it would be interesting to refer to our annual report for the year 1941 in which there was a section entitled "The Role of the Investment Company as Stockholder." We said then and we still believe that the independent investment company in its capacity as stockholder should be particularly well fitted to exercise a watchful role, since its financial stake in the company is considerable, it has no interest to serve except that of the stockholders, and it has at its disposal an adequate degree of training and experience in financial and business affairs. Acting as a stockholder, the investment company should stand ready to support the management when it is right and to criticize it when it is wrong or incompetent. In line with this feeling, we have not hesitated to express frank opinions to managements when we believed it essential for the best interests of a company and its stockholders to do so. This has been especially true in the matter of dividend policy, for it is believed that investment company executives are particularly well fitted to understand the financial needs of an enterprise and can also appropriately stand up for the rights of the average stockholder.

Copies of our latest quarterly report, dated April 25, have been distributed to you. This shows you how the Trust is invested today and reflects our thinking on the country's economic outlook and the relative prospects for various industries. You will note that the largest industry groups in the compilation of our holdings on pages 4 and 5 are, in order of size, the oils, utilities, chemicals and drugs, mining, railroad, and retail trade industries. This line-up is about the same as a year ago with the exception that at that time store stocks outranked the mining and railroad industries.

You can see from our heavy emphasis on natural resources that we have given consideration to inflation possibilities. Also, you can see that relative tax-shelter position has been important in our thinking and has been met through investments in oil, mining, utility, and railroad companies. The relatively important investment in utility stocks gives us a defensive position which we believe to be warranted, and, to some extent, the oils may be considered to have defensive aspects, at least to the degree that the oil business has a growth factor which immunizes it somewhat from cyclical influences. Among the so-called growth portion of our portfolio are not only the oil stocks but also the chemicals and drugs which, of course, will be among the chief beneficiaries of excess profits tax repeal whenever that day arrives. You will note the main part of the store group that consists of investments in national mass distributors, such as the mail order houses, Penney, and Federated. As the country grows, these outstanding companies should do an increasing amount of business, both absolutely and relatively.

Through this diversification pattern as shown in the quarterly report, the Trust, we believe, is in a good position at the present time to meet developments of the future. In the future, as in the past, we, as trustees, shall manage the investments of the Trust in the spirit of the Massachusetts trustees' investment rule (or Prudent Man Rule), as pronounced by the Massachusetts Supreme Judicial Court in the year 1830—"not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income, as well as the probable safety of the capital to be invested." Investing today requires unqualified adherence to these fundamental principles just quoted—equally as much as on that day nearly a century and a quarter ago when they were first enunciated. *(Applause)*

* * *

Chairman Johnston: Thank you, Mr. Whitney.

The next speaker is Mr. A. Moyer Kulp. He has remained loyal to Philadelphia. After having earlier positions in that city, he joined Wellington Fund in 1929, and has been with them ever since. He is vice-president and executive director of the investment committee of Wellington Fund. His subject is "Investing Today for a Balanced Fund." Mr. Kulp. *(Applause)*

* * *

A. Moyer Kulp: I feel so very humble before a gathering of this sort with so much combined brain power and experience that I hesitate a little bit to stick my neck out, but I think that is the best way to get something out of these sessions.

My discussion on the subject of "Investing Today for a Balanced Fund" will deal principally with investment philosophy and procedure, in the belief that a discussion and exchange of ideas on how we think should be interesting and mutually helpful. The end result of what we think and do is the Wellington portfolio, with which many of you are familiar.

A BALANCED FUND

A balanced fund can be defined as one that normally invests in bonds and preferred stocks as well as common stocks, the proportions being varied according to the management's analysis of present and prospective conditions. As you would naturally expect in this field, there is room for considerable range in the degree of balance among the various balanced funds. The security analyst and the investor can, therefore, select a fund adapted to the needs of a particular individual. The Wellington Fund is designed and managed to fit the needs of the typical investor, which we define as middle ground between the very conservative trust fund and the aggressive common stock investor. Specifically, our objectives are

1. To pay reasonable dividends.
2. To secure profits.
3. To conserve principal.

We endeavor to attain these objectives through

1. Broad investment diversification.
2. Balance in investments.

At the close of 1951 we held 292 securities divided among 178 common stocks, 79 preferred stocks, and 35 bonds in 32 different industries, as well as some cash and Government bond reserves. We have always believed in broad diversification in order to reduce risk. We are believers in the application of investment principles; that is, avoiding great concentration, in either industry or company, by spreading the risk over a large number of favorably situated industries and companies.

We are great believers in balance between fixed income securities representing dollars and common stocks representing ownership or purchasing power. You may be interested in our management's current idea of balance for a very conservative balanced fund, as evidenced by our quarterly report of March 31, 1952. This report showed cash and Government bond reserves at 12%, and 23.8% in bonds and preferred stocks of good investment quality, or a combined defensive position in high-grade fixed-income-bearing securities of 35.8% of total resources. To assure further both stability and ready convertibility into cash, 24% of these bonds mature in five years, 53% in ten years, and 93% in fifteen years. Using a spaced maturity schedule in the bond portion of a balanced fund tends to reduce price fluctuations and also greatly improves liquidity by bringing in some maturing cash each year and by improved marketability in the near-by maturities if we want to sell at a bad time. On March 31, 63% of resources consisted of a broadly diversified list of common stocks; the combined common stock and equity risk seniors were 64.2% of resources. This 63% common stock position compares with 50 to 55% which we used to consider par before the postwar period. We have

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considered 60 to 65% in common stocks as a more appropriate policy for the conditions prevailing since 1949.

HIGHER PROPORTION OF COMMON STOCK

Population increase; large money supply; social, labor, and inflation trends seem to call for a higher proportion of common stocks in order to protect the investor's purchasing power through a higher market value and through higher dividend income which have accompanied inflation of the U. S. dollar. The higher percentage we have been investing in common stocks can also be attributed partly to the scarcity of middle-grade and speculative bonds and preferred stocks which were available in large volume on an attractive income and price basis before World War II. There are few such situations today, and the supply is small. Perhaps the best test of equity risk exposure in an investment account is the combined percentage of common stocks and equity seniors held. On this basis, our present 64.2 per cent over-all equity risk is considered moderate and in line with pre- World War II policy.

You may be interested in procedure at times when our investment committee decides upon a change in investment policy and in the steps that are taken to move into either a defensive or an aggressive position. For example, when security markets are booming, a series of defensive steps are taken to conserve principal, the degree of such a program depending on the degree of excess of optimism or hope believed to exist in the market. These defensive steps are

1. Replace high-priced cyclical stocks with stable income issues.
2. Liquidate amply priced middle-grade and speculative bonds and preferreds.
3. Increase holdings of high-grade preferred stocks, corporation bonds, and U. S. Treasury bonds or notes; also improve stability and liquidity through spaced bond maturities.
4. Reduce common stocks selectively and, if necessary, by a substantial percentage.
5. Accumulate cash.

The broad defensive program beginning selectively and concluding on a broad scale provides a strong and effective program for reducing risk of excessive price and income fluctuation and for introducing the desired degree of stability. During the last year we have steadily and gradually been moving toward a more conservative invested position, even though the common stock ratio has not been reduced. Our March 31 report showed Wellington's defensive position had been improved by

1. High-priced cyclical stocks replaced with stable income issues.
2. Amply priced equity seniors replaced with investment-grade bonds.
3. Near-by short-term and intermediate bond holdings increased substantially.

This policy clearly illustrates our current investment policy, which is conservative rather than bullish or bearish, with greater emphasis on the composition of the common stocks than on minor changes in the percentage of common stocks held.

On the other hand, when security markets become depressed and a more aggressive investment program is adopted by the investment committee, these steps are taken:

1. Increase middle-grade and speculative bonds selectively.
2. Invest cash and Government bond reserve in a normal manner.
3. Increase common stock holdings selectively and finally on a broad scale.
4. Add carefully selected cyclical and high-income stocks.

This flexible type of approach can readily be adapted to declines in business and market reactions, whether they be minor or major in degree. It should result in a maximum common stock invested position in really severe declines; it results in seizing some of the opportunities in intermediate declines without getting involved or excited about minor fluctuations.

PRODUCES CAPITAL GAINS

This investment philosophy and the procedure outlined produces capital gains to supplement ordinary income. These capital gains are the by-product of a flexible policy adapted to meet changes in the business prospect or in the security markets. There are two schools of thought, as you all know, with respect to capital gains. We believe there is a sound basis for these differing viewpoints. The investor can select the fund that fits his requirements. There are many individuals and institutions not bound by legal restrictions who can and do exercise the option of reinvesting these capital gains at asset value, which we like to see them do. On the other hand, there are some stockholders whose ordinary investment income is insufficient and who welcome capital gains distributions to supplement their reduced take-home investment income in these days of high taxes.

I have gone into some detail in outlining our procedure in activating either a defensive or an aggressive investment program because many investors think primarily in terms of the common stock ratio, whereas our experience leads us to believe that the composition of common stocks is just as important as the amount held. This is where continuous study and analysis and the hard work of evaluating come into play.

Selectivity and evaluation are a particularly important part of the investment management problem today, both in individual stock selection and currently in endeavoring to strike a good balance among stable income stocks, growth stocks, and cyclical stocks. Our idea of balance in common stocks to fit our present cautious policy is as follows:

40% stable income stocks believed to have above-average price stability and income continuity.

8% dynamic-growth stocks selling on a low-yield, high price-earnings basis.

15% cyclical stocks with average to above-average price risk.

If we include moderate growth situations such as oils, insurance, paper, and air lines, classified under the stable and cyclical groups, there is a total of 22% held in common stocks with growth characteristics. With almost 36% in high-grade fixed-income securities and about 41% in stocks believed to have above-average price stability, it is evident that the management is endeavoring to provide a good degree of stability during the present uncertain period. We have endeavored to place most of the common stock funds in industries and companies that should do reasonably well in either rearmament or peace, inflation or deflation, and change in Federal administration if that should occur this fall.

STABILITY IMPORTANT IN OUR THINKING

You will notice that stability appears to be strongly in the background of our thinking. As one of the most conservative of the balanced funds, we have framed our investment policy so as to provide above-average downside protection when business booms have carried a good way or when the security market appears to reach a rather optimistic stage. Volatility is easily confused with prevailing market trends unless this test is applied on a realistic basis. Wiesenberger's "Investment Companies" manual has a convenient table of price volatility of both open and closed-end funds. A fund with a high volatility index will move more rapidly either up or down than a fund with a low volatility index. This index of volatility or stability is particularly revealing over a period of time. A good rising market test is provided by the period from the 1949 low to the 1952 high; a good declining market test is from the 1946 high to the 1949 low; a fair level market test is provided by the period from December 31, 1945, to December 31, 1949. The buyer of a conservative balanced fund is usually seeking a sound investment, is primarily concerned with reasonable income, and wishes to avoid excessive price fluctuations on his holdings. This is an important consideration in shaping our policy.

TURNOVER OF INVESTMENTS

Turnover of investments in a balanced fund depends on the degree of emphasis placed on revision in bonds and preferred stocks as well as in common stocks. It also depends on whether long-term or short-term viewpoints are a major factor in the management thinking. The extent to which Government bonds are used as a temporary investment for cash has an important bearing on turnover. We have been trying to develop a longer-range viewpoint on industry and company trends than we did in earlier years, hoping to reduce turnover. I am not sure just how much of this is due to more stable conditions and how much is due to seasoning and refinement of our management. In any event, there are no clearly defined ratios of turnover in the industry.

We believe there is a definite field for special situations, but, as with equity-type bonds and preferred stocks, special situations of outstanding merit of investment or semi-investment quality have been scarce recently. This is probably the result of the great expansion in volume of business and profits in the last decade. We have not used special situations so frequently as in earlier years, largely because of scarcity and in some instances because of size or degree of risk.

FIELD FOR SMALL AND LARGE FUNDS

With respect to size, I think the situation is identical with that of other businesses. There is a definite field for both small funds and large funds so long as they are well-managed funds. Each has the strength of its advantages. The small fund rarely ever thinks of its influence on a market. The large fund has greater resources and can command a broader scope of management. The larger fund tends to develop a longer-range viewpoint and has the great advantage of being offered special situations or large blocks of securities—often before they show up on the Stock Exchange—which frequently are not called to the attention of a small fund. In our own situation, growth in the size of the fund has not handicapped investment performance, nor does it appear to have handicapped the investment performance of the largest funds: Massachusetts Investors Trust, for example, just having closed a fine year. Although investment funds have grown to large size and have grown rapidly, they are still small in relation to the general economy and other savings institutions. On the contrary, growth in size has been a favorable factor in reducing per-share operating costs to the share holder.

THE NEAR-BY OUTLOOK

Now let us take a look at the broader picture of the near-by outlook. There is a wide difference of opinion about the current outlook for business and the stock market, and these differing views are reflected in the portfolios of the various balanced funds. If business activity holds up reasonably well through 1952, then historical price-earnings and dividend relationships suggest that the common stock market has remained in a sound value area which, in our opinion, would support an investment position such as we have just discussed. The business community has been shaken by the implications of steel plant seizures by the Government. The manner in which this issue is resolved will have a lot to do with the profit outlook. Also, present indications point to a reduction of private capital expenditures, and a peak in Government spending in 1953, which suggests a temporary ceiling in general business activity. If the present level of dividends should be threatened seriously, then our present investment policy would require reconsideration. However, let us also remember that we have in the last decade had two demonstrations of the remarkable flexibility of the American economy and the amazing adaptability of its management to cope with sudden crises of great magnitude. The postrearmament adjustment, large as it seems to be, appears well within our capacity to meet in the light of this background. Furthermore, the present generation of businessmen and investors has been uniformly cautious for years except for several brief intervening periods, the last following the outbreak of war in Korea. Consequently, it would seem that business and the stock market are on a sounder basis than is generally realized and, accordingly, may be in a better defensive position than is generally credited. The business readjustment in consumer goods, which has been under way for many months, is restoring health and balance through reduction of inventories and inflated prices where they existed.

The stock market for a number of years has been largely influenced by investment thinking. This investment influence has been accentuated recently by the growth of mutual funds and pension funds, and now life insurance companies and savings banks have been authorized to invest in common stocks. It seems quite evident that the demand for common stocks has expanded and is still growing. Even if only a modest percentage of the flow of savings in these large institutions is invested in common stocks, their influence on the stock market at times may become quite pronounced because most of the demand will be concentrated in a relatively small number of high-grade issues. Currently a part of this demand is being satisfied through the large amount of new-money common stock financing. This demand might become quite pronounced if business activity and new-money financing should recede at a time when the public is saving at a high rate. We appear to have entered a new phase in our financial history whereby a portion of the mass savings is becoming institutionalized in equities as well as dollars. This development can be a powerful influence in improving the price-earnings ratio and reducing the relatively high yield over fixed-income-bearing securities, which common stocks have been providing. Some of the largest of these institutions are primarily income buyers, and dividend yields may become a still more important factor in determining stock prices. It could be an unexpected factor in cushioning a decline or providing greater stability than is expected by most people.

MAY SOUND OPTIMISTIC

My talk may sound a bit optimistic, but I have merely tried to discuss the favorable as well as the unfavorable factors. There have been so much doubt and pessimism prevailing in the financial district for some months that it seems timely to look at both sides of the picture in order that we may strike a reasonable balance. This seems important because so much attention has been focused on the things that are wrong that any significant favorable development would catch most people off guard.

Before concluding, it is well to take a look at the probable shape of the 1950 decade from the investor's standpoint. This decade is characterized by population increase, scarcity of labor, high wage costs, high spendable income, and rapid technological advances such as electronics, automatic devices, and chemical processes. We as analysts will find these years marked with great opportunities and pitfalls as these rapid changes bring their influences to bear in industry. This is a great challenge and opportunity which we in the Wellington management welcome and which the financial analysts, as evidenced by the size and serious nature of this annual meeting, are prepared to meet. *(Applause)*

* * *

Chairman Johnston: Thank you, Mr. Kulp.

Our third speaker is Mr. David G. McCornack. Since coming to Wall Street in 1929, Mr. McCornack has spent most of his time in closed-end trusts, among them Tri-Continental, American Cities Power and Light, and Blue Ridge. He has been with Adams Express Company since 1948 as vice-president and member of the board of management. Mr. McCornack will speak on "Investing Today for a Closed-end Trust." Mr. McCornack. *(Applause)*

* * *

David G. McCornack: Mr. Chairman, ladies and gentlemen, I am indeed pleased to take part in this program this morning. We know our western friends are noted for their hospitality and cordiality, and this Convention appears to be no exception.

MAKING COMMENDABLE CONTRIBUTIONS

The analyst Societies over the country are making commendable contributions to the technique of security analysis, and at the same time are performing a real service to the investing public by providing adequate and accurate information on the many outstanding issues of securities.

In their broad aspects, as institutions that provide the average American investor with a method of investing directly in a diversified portfolio of good securities under continuous supervision, the closed-end and open-end investment companies have much in common. Both endeavor to offer (1) competently and continuously supervised portfolios, (2) a security paying dividends in amounts as liberal and as regular as is consistent with prudent and declared investment policies, and (3) an investment that has marketability. From my experience and observation, the research and analytical departments are operated in much the same manner, that is, with a staff of senior industry specialists, junior statisticians, and at times retained consultants in fields such as oil, gas, and mining. Staff members and company executives establish and maintain numerous and broad contacts directly with officers of companies throughout the country, all such efforts being directed toward the formation of sound and informed judgment in handling the portfolio.

OPEN- AND CLOSED-END COMPANIES

There are, however, some points of differences between open and closed-end companies about which you, as competent analysts, have general knowledge, but I think it would be well if I were to highlight them for you in outline form. I shall deal first with differences in investment policy and operation, and then with what I will call physical variations.

HIGH DEGREE OF CONCENTRATION

One characteristic of the closed-end companies is the frequent appearance of a fairly high degree of concentration, not only in a particular industry, but at times in a few selected issues. Some years ago many closed-end trusts were heavily invested in public utility holding company preferred and common stocks while these holding companies were being broken up or liquidated, or part of the assets "spun off" under orders from the SEC. Such positions were maintained for several years until most of the utility holding companies had complied with the Act. Currently, there is a high degree of concentration of invest-

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It is perhaps of interest to note that closed-end companies have, at certain stages of the business cycle or as opportunities have presented themselves, invested varying amounts of money in temporary lockup situations, or other special investments with no public market and little likelihood that one might be created. Carefully selected, these can be highly profitable ventures, and, where day-by-day portfolio valuation is not necessary for purposes of establishing prices for distribution or redemption of shares, this type of investment has found a place in the program of many closed-end trusts. I must not fail to emphasize, however, that selection, timing, and patience are important for full realization of the profit possibilities.

RATIO OF CASH TO TOTAL ASSETS

My third point in this first category deals with the matter of invested position—that is, the ratio of cash and Government securities to total assets under varying conditions. The closed-end companies, in the past, have on occasions built up sizable "reserve" positions, indicative of a cautious attitude or awaiting clarification of the outlook for the security markets. At times, in recent years, a number of closed-end companies have increased cash and Governments to 20 to 25% or more of net assets. Although there were one or two large open-end trusts that also have had large percentages in cash and Governments, yet on the whole open-end trusts have had a tendency to stay more fully invested. I can offer you no specific results concerning the wisdom of this course of action, because the outcome has been influenced to a marked degree by how well a management had selected issues. I believe it is true, however, that those trusts which are continuously selling shares lay a good deal of emphasis on the regularity of the rate and continuity of income, and there may be some element of sales resistance to a portfolio that is only partially invested.

PHYSICAL DIFFERENCE

If we turn now to what I originally called physical differences, the first point, of course, is the matter of the relationship of market price in a free market to asset value. Most of the stocks of the closed-end companies are listed on the New York Stock Exchange, the New York Curb, or other Exchanges across the country. With few exceptions, good, active markets exist for these issues, where supply and demand determines the market price at any given time. Under such circumstances, a few closed-end common stocks sell at a premium *over* asset value, but most of the others sell at a discount *from* asset value.

COMMON STOCKS SELLING AT PREMIUMS

Those selling at premiums include the common stocks of Lehman Corporation at a 7.0% premium and General American Investors at 3.5% as of March 31, 1952. Both have had good records and are ably and soundly managed, and their portfolios represent good value.

Yet there are other closed-end companies with similar qualities that sell at substantial discounts. For the most part these discounts approximate 15 to 20% below asset value, although a few run higher.

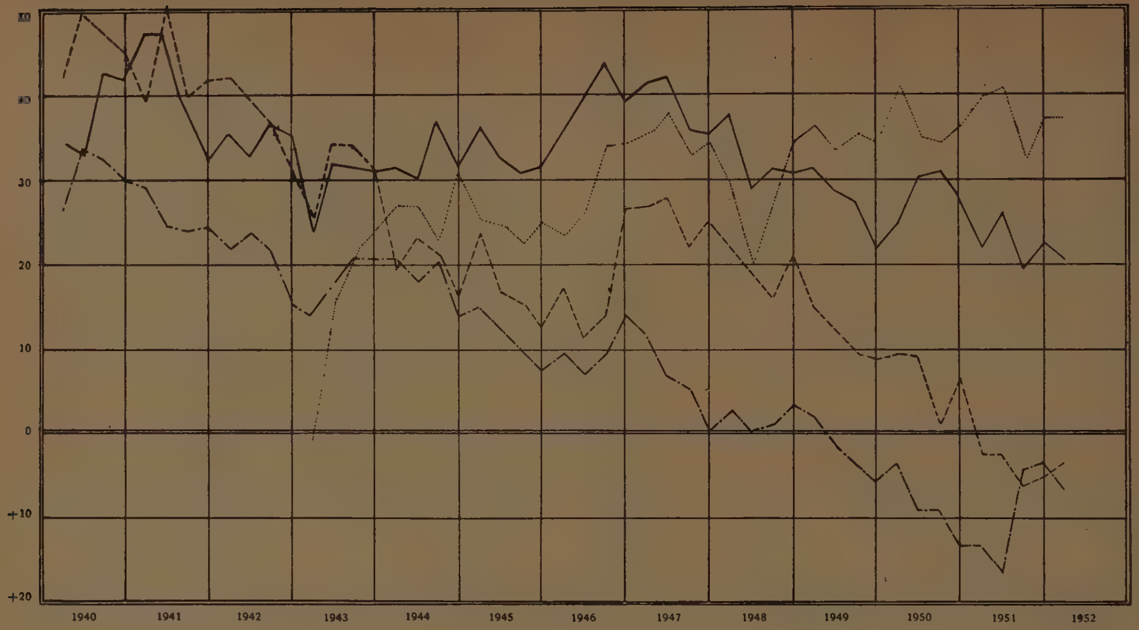
WHY THE RANGE?

You naturally ask why the range from premium to discount, and what has been responsible for changes that have taken place. What has been done by one or two that the others have not done? This is a knotty problem, but I will try to give you a little historical background and our current thinking.

For many years the capital stocks of companies selling materially below asset value were repurchased by the companies themselves in fairly large amounts with some beneficial results accruing to the remaining stockholders. History shows that repurchasing, however, did not materially change the discount. As a practical matter, a large amount of stock has to be bought in to make any material difference in the asset value of the remaining shares. For example, if approximately one fourth of the capital stock of a company were to be repurchased at a 20% discount, the net asset value of the remaining shares would show an increase of only 6.7%; and, if the discount was 10%, the net asset value would rise 3.3%. I believe you will recognize that these percentage returns are small in relation to the capital retired. It is quite apparent that, in order to make a material difference in the asset value through the purchase of shares and to keep the market price of the stock at asset value, a plan would have to be launched involving virtual liquidation, or a shrinkage in the size of the trust to the point where there would be a real question of whether or not it was economically sound to keep the operation going.

DISCOUNTS NARROWED WHEN MARKETS ADVANCING

Discounts have narrowed substantially at times when public sentiment has been highly optimistic and markets have been advancing. This was especially noticeable among certain closed-end companies which by policy declaration concentrated in a single industry. For example, Petroleum Corporation with its oil portfolio sold at a discount of only 2 or 3% in 1945 and 1946, and even went to a premium for a short time. National Aviation, a trust specializing in air line and aircraft manufacturing securities, has at times sold at a discount of 5 or 6% when air line and aircraft securities were in great popular demand. In both instances, however, when the "fashionable period" or popularity wore off, the larger discounts of 20 to 25% reappeared.



Discounts in Selected Closed-End Investment Company Common Stocks

Dashed line—General American
Solid line—Adams Express
Dash-dot line—Lehman
Dotted line—Tri-Continental

I think we have now had enough time and experience to say—still with modesty—that probably the most important single factor that determines the time and degree of discount is the payment and ability to continue payment of capital gains dividends.

SUPPLEMENT Q

As you may know, with the enactment of Supplement Q of the Internal Revenue Code, under which most open- as well as closed-end investment companies qualify, for tax purposes, as "regulated investment companies," the trusts have received special treatment in order to avoid double taxation to their shareholders. In general, to qualify under Supplement Q, certain requirements concerning diversification of asssets must be met, and at least 90% of the net investment income must be distributed to share holders. The trusts then are not required to pay Federal income taxes on the amount of income so distributed. The same principle applies to such part of realized long-term capital gains as are distributed.

Recipients of such distributions, however, are required to pay a tax on the net investment income as though it had been received by them directly, and the long-term capital gains so distributed are taxable as though they had been realized by a stockholder. Capital gains dividends are recognized as such even though the share holder has held the stock of the trust less than six months. This has been an important bit of legislation for our industry.

I have had a chart prepared, a copy of which is available to you if you wish, which shows the discount by quarters on four closed-end investment companies over the last twelve years. On it are plotted Adams Express, General American Investors, Lehman Corporation, and Tri-Continental.

Two of these trusts, General American and Lehman, have been paying capital gains dividends continuously for seven or eight years. Gradually the market prices for these two trusts on the Stock Exchange approached asset value so that the discount was eliminated, and for some time they have sold at a premium over asset value.

ADAMS EXPRESS

Adams Express, from 1942 through the middle of 1949, sold at a discount ranging between 30 and 40%. At the end of 1948 Adams elected to be taxed, henceforth, as a "regulated investment company." In 1950 and 1951 the discount on Adams narrowed to between 22 and 30%, and in December 1951 the first capital gains dividend was declared and paid. Currently the discount is about 20%. Petroleum Corporation, to which I referred earlier, has paid a capital gains dividend for two consecutive years, and the discount is now about 15%.

It should be stressed here that closing this discount gap takes time, but, when tax costs of a portfolio of securities are materially below current market prices, the continuation of capital gains dividends seems a reasonable probability.

TRI-CONTINENTAL CORPORATION

The fourth trust on the chart, Tri-Continental Corporation, has had, for a number of years, an announced policy that realized capital gains would *not* be distributed to share holders, but would be retained in the trust and taxes paid thereon. This common stock, after it had asset value of $3 to $4 per share, has sold at a discount ranging between 25 and 40%, and on March 31, 1952, it was 37%.

One other point which I believe is important when considering discounts is the matter of how much knowledge investors have about this or that trust. It is fine to have a good record of performance, dividend payments, selection of portfolio, and generally sound and capable management, but, if only a few investors know about these qualities, they may not receive proper evaluation.. I do not suggest that the companies have publicity agents, but it is a service to the investing public to have thinking analysts like yourselves, as well as others, know more about these companies—especially in view of the relative values. I think it is only fair to say that a good deal more time, energy, education, and, dare I say, money have gone into directing attention to the history, merits, and characteristics of open-end trusts than those in the closed-end group.

NOT BEEN IN POSITION TO EXPAND

My second point for your consideration is the fact that closed-end companies, in general, have not been in a position to expand their equity capital except in a few instances. This, however, is changing as premiums begin to appear, and it is entirely possible that some expansion in the capital of existing closed-end companies, as well as the formation of new enterprises, may take place in the foreseeable future. Certainly there is room for growth, and, because I am convinced the records are good, that the companies are here to stay as permanent and growing institutions, I believe they are justified in going to the investing public for capital.

OFFER A VARIETY OF SECURITIES

My last point is that closed-end companies still offer quite a variety of securities to the investor. There remain outstanding a few debentures, quite a number of preferred stocks, and a range of common stocks involving variable degrees of leverage or no leverage whatsoever. And of course, I must not forget, for those more imaginative people who like to dream, hedge, or play the long shots, there are still a few warrants in the market.

PRUDENT MAN RULE STATUTE

In conclusion, let me emphasize that, as these instruments draw more and more attention in the sphere of finance, all of us are assuming greater responsibilities. In recent years many states have adopted the Prudent Man Rule Statute, which, in effect, permits fiduciaries to invest in equity securities. Because many trustees had limited funds at their disposal, and were unable to purchase enough different securities to obtain the desired diversification, they turned to investment company shares. Pension funds have the same problem and, as many more small funds come into existence, trustees are using the medium of the investment company shares to an increasing degree to obtain an equity position.

To carry out these responsibilities we, as managers of the companies, have an uncompromising obligation to see that they continue to develop soundly, honestly, and competently. As analysts of securities, dedicated to the task of furnishing accurate and adequate information together with well-tailored judgments to the public, you also are duty bound to make sure that you become familiar with these investment companies and their objectives so that the investor gets exactly what is wanted and needed. We live in a glass bowl, our lives are an open book, we issue complete quarterly reports, our doors are always open, and we are not difficult to analyze. You are in business to advise the investing public competently and wisely in a professional capacity. Let us work together to do the best job possible. *(Applause)*

* * *

Chairman Johnston: Thank you, Mr. McCornack.

The concluding speaker is Mr. Kennard Woodworth. Mr. Woodworth was in charge of investment research of the Boston Insurance Company from 1931 through 1942. After service in the Navy he joined Eaton & Howard, of which he is now a vice-president and director. His subject will be "Investing Today for a Growth Fund." Mr. Woodworth. *(Applause)*

* * *

Kennard Woodworth: Thank you, Mr. Chairman. Ladies and gentlemen, this morning I am to speak on the subject of "Investing Today for a Growth Fund." If I took these words quite literally, it would involve telling you what we hold in the Eaton & Howard stock fund portfolio. This is an open book—a matter of record. I do not intend to describe in detail the individual securities nor discuss with you the merits of each of the items held. I am going to tell you what we think and then how we think—and of the two, in my opinion, how we think is of infinitely greater significance.

The organization with which I am connected devotes its major efforts to the study of industries and individual companies. Although we recognize the advantages of careful timing of investments, we believe that concentration on timing is dangerous in practice and likely to prove very unsatisfactory. We consider that investment management has very little to do with guessing the short-term fluctuations in the stock market.

STOCK FUND OBJECTIVES

The objective of our stock fund is to provide growth of both principal and income. As a matter of record, the fund has produced a satisfactory income ever since its organization. In order to meet these objectives, we place emphasis on the selection and ownership of common stocks in companies that appear to offer good prospects for increases in earnings and dividends. This policy contemplates participation in the profitable development of new products, processes, and services. It also takes into account the profit opportunities of well-situated companies in certain older industries which may be growing. The fund has complete freedom of choice in making its investments.

PORTFOLIO DIVERSIFIED

Look over our portfolio, and you will notice that we stick pretty closely to time-tested principles. Our guiding philosophies are contained in the so-called "Prudent Man

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ule." We believe in value. Measurement of value is a usiness with which you are all familiar. We believe in iversification between both industries and individual companies. There are 89 companies in 27 different industries epresented in the portfolio. We attempt to concentrate ur holdings in the companies and industries that have the est prospects over the years ahead. We are 100% in avor of growth—growth of income and growth of principal. Do you know any investor who isn't for this platorm?

We know that many conditions and factors affect companies, industries, and stock prices. We hope today, of ourse, for real peace; but we also recognize the possibility of war. The arrival of either condition will certainly afect investments. For a number of years, the United States nd the whole world have been experiencing inflation. What lies ahead? Will it be inflation or deflation? The ntelligent investor adjusts his holdings to protect himself gainst the shrinking dollar. Nearly 40% of the fund's ndustrials are invested in companies having important atural resources.

Above all, we attempt to concentrate our investment oldings in strong companies—leaders in their respective ields—companies with strong financial positions and companies that are under the direction of able, experienced, nd aggressive managements.

We shall, under certain conditions, be satisfied to seek modest growth. Financial institutions (such as Northwest Bancorporation), fire and casualty companies (with American Insurance as typical), and growing electric light and power companies (such as General Public Utilities, Middle South, and United Gas) deserve a place in an investment fund that is dedicated to increasing income and capital.

We at times invest in lesser-known companies that appear to have good prospects but only after we have satisfied ourselves on the potentialities of the industry and the capabilities of the management. Stocks of companies such as Trane Company and Sprague Electric have probably not yet gained market prominence.

GROWTH FIELDS FAVORED

We at Eaton & Howard by interest and training try to be alert to developments in the field of science. Look through the portfolio today, and you will see to what extent we are participating in new and expanding products and industries. Let me mention only a few to you.

Uses for lighter metals are rapidly developing. Our best judgment, supported by our contacts in industry research, forecasts an even greater growth. The stock fund holds an important stake in aluminum, magnesium, and titanium. We are convinced that air conditioning has a glowing future. Air transportation, stimulated by the military and civilian demands, is developing and taking business away from older and established forms of transportation. Fiberglas offers exciting potentialities. Soapless soaps and detergents are taking over the Nation's washing problems. Krilium, the startling new acrylonitrile base product, will control erosion and condition the soil. Polyethylene, the lightest of all common plastics—electronics—germanium transistors and printed circuits—jet engines—petrochemicals—Dynel, Acrilan, Dacron, and high-tenacity viscose tire cord—natural gas for home heating and industrial purposes—miracle drugs, antibiotics, hormones, and cortone. I could go on and name many more whose prospects are equally good that are represented in the stock fund.

Growth is fine and a worthy objective for any investment fund. Its achievement requires training, skill, patience, and good fortune.

GROWTH STOCK BUYERS OVERESTIMATE FUTURE EARNINGS

With encouragement from the past and rosy prospects in the future, the buyers of growth stocks at times lose their sense of proportion and pay excessive prices. The investor's philosophy changes with his psychological state. Investment fund managers, pension fund trustees, and others interested in common stocks as long-term investments are seeking stocks that will combine a good past record with superior future prospects. These long-term investors are in danger of being overly impressed with past records. Some managers may be guilty of substituting name tags for price tags.

We view with skepticism the enthusiasm for growth stocks at any prices. We will not accept them as good investments merely because they represent growth industries.

The term "growth stocks" is beginning to assume the characteristics of a fad.

You are all aware of fads in investing and fads in investments. You know about the infallible systems to forecast the trends of the market, the Dow theory, the velocity of money theories, and the formula plans. You remember the fixed trusts of the 1930's when investment managers were rated as liabilities.

CHARACTERISTICS OF GROWTH COMPANIES

Let us talk for a moment about growth companies. I shall comment on three points: (1) What is meant by a growth company, (2) can the investor identify such concerns with reasonable accuracy, and (3) does the price paid for a growth stock more than discount the future possibilities?

The most satisfactory definition of growth is simply a company that has demonstrated and, it is hoped, possesses prospects for better-than-average growth in sales, profits, and dividends. The answer to this question is simple.

Now the second question: "Can the investor identify such concerns with reasonable accuracy?" A number of favored concerns have grown and prospered far beyond the average. A growth company, however, cannot be identified solely by an examination of the past. It requires considerable supplemental investigation as well as sound business judgment to be confident that it will continue to be a growth company. This is a job for the professional analyst. Companies that have followed the policy of plowing back earnings are identified as growth companies. Corporations that retain large amounts for development and research work are called growth companies, but in themselves these two factors (reinvestment of earnings and heavy research expenditures) cannot guarantee a successful future for companies. The investor should know not only the kind of research facilities owned but also the abilities of the researchers and the potentialities of the field under investigation.

Now we come to the final and probably the most difficult of all the questions to answer satisfactorily. That is, to what extent is the price paid for the growth stock already discounting the future growth? It is obvious that the investor who can successfully identify a growth company *when its shares are available at reasonable prices* is certain to do superlatively well with his capital.

What price is the investor justified in paying for an attractive future outlook? Characteristically, stocks supposed to have good prospects sell at relatively high prices. How can the investor tell whether or not the price is too high? There is no clear-cut arithmetic that sets a limit to the present value of a constantly increasing earning power.

GROWTH STOCKS IN EARLIER BULL MARKETS

A quick historical review may furnish us with some timely examples of earlier errors of thinking in the field of growth stocks. Before the 1920's, there were no established common stock investment principles. There were no analysts.

The 1929 growth stock enthusiast predicted that some companies would continue to grow and increase in value forever. They did—but did the prices of the securities? His 1936 counterpart enunciated the theory that growth company stocks could be purchased at any time at any price.

Again, in 1946, some investors concentrating on growth stocks bought United Air Lines and Northwest Airlines in the sixties. I don't need to tell any of you of the subsequent market record of these "growth stock purchases." The industries grew as predicted, but the high prices paid for the stocks turned growth investments into poor speculations.

Investors may hope to concentrate their funds in the coming Eastman Kodaks and duPonts at prices that will yield a future fortune. As professional investment managers, we cannot expect at all times to avoid mistakes. We have mature enough judgment and experience not to concentrate our holdings in what the market says is the most glamorous group. The common stock that is winning the market popularity contest may be the prettiest girl at the time, but that doesn't mean that she would be the best one to marry and live with. And the market today is pinning orchids indiscriminately on many so-called growth companies.

DESERVE PROMINENT PLACE IN PORTFOLIO

Growth stocks deserve a prominent place in every stock portfolio. Remember, however, market popularity and value rarely go hand in hand. There is no simple answer to the question: "Does the price paid for a growth stock more than discount the future possibilities?" The answer lies in the judgment of the investment manager—the analyst. How will we recognize this important individual when we see him? What does he look like? It will not be difficult. Look around this room.

He is a scientist—at least he has a speaking familiarity with most branches of science and industry.

He is an engineer—he may not be able to operate a turret lathe or figure stress analysis or lay out a power station, but he knows a good and efficient plant when he sees one.

He is familiar with labor relations. He is probably an accountant of sorts—at least he reads and understands income statements and balance sheets.

Understanding taxes is relatively simple for him. He must be an author and sometimes even a salesman. He must combine the orderly mind of the statistician with the intuitive reasoning of the psychologist.

He should be a well-read scholar, and he always must be politic. He is the close confidant of top business management. He never stops working, thinking, and dreaming.

He knows something about everything and perhaps little about anything. Do you recognize him? Yes, you're right! He is a 1952 model analyst. Besides gathering, assimilating, and correlating information, he digests it and comes up with sensible investment recommendations.

What was the basis for investment decisions thirty years ago? There were few if any analysts. There was no public information as we know it today. Investment decisions were based on information from someone who had direct contacts with the company's management. The only other sources of information were the rumor mills spreading stories for strictly speculative purposes.

STATISTICIAN APPEARED IN 1920'S

In the 1920's the statistician appeared. Statistical departments were training grounds for banks and investment firms. Partners of investment firms and senior investment officers of banks, all brought up in the tradition that the only investment information worth having was that obtained from "insiders," had little comprehension of the work of the statistician.

I don't need to tell you how the tide turned in the '30's and the direction in which it has been running ever since. The investment trusts and the investment counsel firms have, I believe, spearheaded the growing importance of the analyst.

Where are the analysts today? Many, I am happy to say, are here and proving that they are the practitioners of a profession.

Can you imagine such a meeting as this Convention taking place a decade ago. Today top industry executives welcome the opportunity to talk with analysts.

The analysts through the individual Societies and through the National Federation are supplying an essential link in the Nation's economic fabric. They are playing the vital role of linking industry and the investor. Professional business management meets professional investment management. *(Applause)*

* * *

Chairman Johnston: Thank you, Mr. Woodworth.

In the few minutes that remain, our speakers will be very happy to answer your questions. What we ask, however, is that, when you ask a question, please rise, give your own name, and your firm name in addressing the speaker, and please speak loudly. The analysts have covered all the bases I know, but, with the mind power that is here this morning, I think there will be a few questions.

Edward H. Tevriz (Glore, Forgan & Company, New York): If, as you said, Mr. Woodworth, popularity and value oftentimes do not come along I would like to ask two or three of the investment managers why rail securities are not more popular than they have been—except for Mr. Whitney, who is one of the few who said that railroad securities have good values today.

Kennard Woodworth: Mr. Tevriz, did you say you wanted to ask two or three people, or were you addressing that question to me?

Mr. Tevriz: I would like to ask two or three others also. So far as I can see, not only the investment companies but also the insurance companies do not consider that railroad securities are popular—at least from their investment policies they indicate so.

Mr. Woodworth: You meant you wanted George Whitney to discuss that. You see, I have to consult with the experts before answering your question, Mr. Tevriz. What you are saying, I understand, is that, because railroad stocks are unpopular, therefore they might possibly represent good value.

Mr. Tevriz: Not necessarily.

Mr. Woodworth: It seems to me that that question could be answered if you will just wait until we move upstairs and we will have a discussion from some of the experts about railroad securities.

Chairman Johnston: We didn't have much of a meeting of the minds on that, which isn't a discredit to the minds either, but may we have other questions?

Samuel B. Jones (Fire Association of Philadelphia, Philadelphia, Pennsylvania): Some of us fellows think the investment trusts have become such a dominant factor in the market that we have some concern about the influence that they will have on the market. Should we enter a period in which capital gains have been accepted to the extent that fund dividends have reached a point where they will have to be paid in the future from earnings primarily rather than from capital gains, what is the future potential market influence of the investment trust going into a declining market? I don't know to whom I am directing that question. To Mr. Kulp, perhaps.

Chairman Johnston: Mr. Kulp.

A. Moyer Kulp: We have gone through that situation several times before. The most recent was 1946. I think most funds had quite a large capital gain that year. Investment trust stockholders accepted dividends about as high as they have ever gotten, you know, but they are quite satisfied with a lower dividend in a poor year. I think that investment funds have been and will continue to be an increasing influence on the market, more in a stabilizing way than in a stimulating way. I think there isn't a single fund that is not looking around for unusual values. If the market turns down, they will be ready to buy some. I know that would solve our investment problem, as far as providing a good income is concerned. If we had a further drop here, we would welcome it as a big opportunity. Have I answered your question?

Mr. Jones: Yes, you have started me on the right path.

Mr. Kulp: Were you thinking about it from the standpoint of liquidating dangers?

Mr. Jones: I was thinking of it from the selling point of view. I think a great appeal is in the income and the capital gains factor, which was pointed out as a very great inducement to the large investor who likes to have tax-free income, but, when the trust salesman hasn't got a large dividend to make his appeal to the buyer, will the inflow of funds diminish, and may that not be a very serious market factor when the investment trusts no longer receive that great inflow of funds daily?

Mr. Kulp: I think several factors will come up there. One is that most of the investment funds, not all, but most of them are sold on an investment basis to people of average circumstances, some very large stockholders, of course, but, by and large, they are moderate-sized investors who are thinking more of the regular dividend than of the price change. They want to be secure of that even if the assets drop in value. They are more accustomed to a regular dividend. I don't think many funds pay the same dividend year by year. The average trust stockholder will have a good yield based on the market value of the shares. If the market goes down 10 or 15 or 20%, the asset value goes down. Then a $1 dividend will be as good as a $1.20 dividend was the previous year. I think very few people buy shares for profit, by and large; therefore, they buy them as an investment medium. There seems to be a constant inflow, whether it be a common stock fund, as George Whitney just mentioned, or whether it is a growth fund such as Ken just talked about, or whether it is a balanced fund such as I talked about. The inflow of cash does vary, but I think that, after the initial uncertainty of a market decline is over, people start to invest again. I know our experience has been that our sales are best, as you would expect with a balanced fund, in periods of uncertainty when people are very glad to give us a part of their investment problem. Our sales are important when the stock market has a lull in it.

Thomas J. McCann (Gerstley, Sunstein & Company, Philadelphia): Since many analysts and many funds think alike by the same numbers I am just wondering what will happen if there should be a sudden change in conditions as, for example, the oil and natural gas industry.

David G. McCornack: I think that is a very interesting question. The example of that is the investment that a lot of trusts have in the American radio industry today. If you will look at it, you will see that there are very, very heavy concentrated investments in American radio, particularly in common stock. If everybody decided that he wanted to get out at the same time, it would have a disastrous effect on the market. I think that, in the matter of concentration, you have to consider, along with it, the quality of security in which the heavy investment takes place. There aren't very many examples, however, of investment trusts *all* acting in concentration. There are cross currents in the business where one trust will be buying when another trust is selling. There have not been too many examples in our business of trusts acting in concert at the same time; so, as far as my own reaction to it is concerned, I am not too fearful of concentration—when it does not exist—having a reactionary effect on the market. Does that give you some help to the matter?

Mr. McCann: Well, I think that is a partial answer. I don't know. Maybe someone else could express some idea about it. It does seem to me that there is entirely too much concentration on certain companies and certain industries. In other words, we would all know pretty well what constitutes a growth company. It seems to me that there may be too much buying of high stock in fiber glass, for example.

Mr. McCornack: I think it is a risk that we have to recognize, and yet, on the other hand, are they going to act all at the same time, and is the security really good enough to be held over a long period of time and not to have to worry about getting in and out at the proper time on the cyclical swing?

Mr. Woodworth: I don't suppose any trust would care to be deprived of investment in good growth stocks just because they didn't get there first! Also you must consider the total ownership of trusts relative to the supply of stock, although I realize the voting supply may concert the most market value.

Stephen L. Joseph (Bach & Company, New York): I have heard it said that the investment trusts have a complicated investment problem in selling securities because capital gains are an important portion of total dividend payments to share holders, and this may complicate the problem of selling securities. In order to effect a steady distribution of capital gains, a trust may be forced to delay sale of securities at the appropriate time. I would like to know how that question is handled.

Mr. Kulp: I will try to answer your question but I am not sure I get your point clearly. Do I understand that you asked about the market effect or the effect on sales of new shares?

Mr. Joseph: No. Isn't there some regularity desired in the rate of capital gains distributions? In other words, in one year you are ready to realize substantial capital gains and yet may not wish to realize any more in that year, yet it might be the appropriate time to sell the security.

Mr. Kulp: That is quite a problem at times, particularly if you are holding cyclical stocks that you do not want to hold on a long-run basis. In that event you have to use your best judgment whether the market will be as good or better the following two, three, or four months. You will probably carry some of the stocks along. In our own situation we are not inclined to hold a cyclical stock after it has been well exploited in the market. For example take copper. Last year fortunately we decided that there was very little to gain by holding copper from a price standpoint; we decided to sell. We didn't wait until 1952. In some other instances we might have acted differently. I think it is a question of weighing the price risk on the cyclical stock, if it is cyclical stock, and, if it isn't particularly overexploited, I don't think the risk of price change is anything that will cause it to topple. As a rule, if it is highly exploited stock, such as a few of the chemicals, you will have to make your decision then instead of waiting.

Chairman Johnston: It is past closing time for this meeting. It is now time for our other sessions, and so we will break up at this point. That is all. *(Applause)*

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At the western railroads forum *(left to right):* Pierre R. Bretey, retiring Federation President; Daniel J. McGanney (speaking); Frederic B. Whitman; and David A. Hill

Western Railroads

MONDAY MORNING, MAY 5, 1952

PIERRE R. BRETEY, Baker, Weeks & Harden, New York; President of the Federation, presiding.

Richard W. Lambourne (Convention Chairman): Ladies and gentlemen, unfortunately, Walter F. Hahn, of Smith, Barney and Company, New York, who was to have been our chairman of this rail conference, had to return suddenly to New York, much to our regret, and so I have asked President Pierre Bretey to act as chairman of this meeting. As one of the Nation's top railroad analysts, and as major domo of that vast and highly successful undertaking, the Special Convention Train, Pierre is certainly a most qualified chairman for a railroad forum. I will turn the meeting over to him—Pierre Bretey! *(Applause)*

Chairman Bretey: I would like to greet you at this Fifth Annual Convention, and I think we are particularly fortunate in having with us two of the most outstanding railroad executives of the United States.

Our first speaker is Mr. Daniel J. McGanney, vice-president of the Southern Pacific Company. I will not attempt to recite for you all of the various steps to the peak of his career, but I will say that he is one of the men responsible for the excellent record shown by the Southern Pacific Company for the past several years. It gives me great pleasure to introduce our speaker, Mr. McGanney. *(Applause)*

* * *

Daniel J. McGanney: Mr. Chairman, ladies and gentlemen, welcome to San Francisco and the West.

This occasion is one we have looked forward to with much pleasure. We like to have visitors, and no group is more welcome than yours.

My assignment today is to discuss with you the business and revenue outlook for the western railroads. We will, however, limit the discussion to the Pacific Coast and southwestern regions reached by Southern Pacific and its neighboring lines. To some extent the data given will apply only to Southern Pacific Lines, but, because our discussions will be regional, what is said for Southern Pacific also applies in a large measure to our near neighbors, the Atchison, Union Pacific, and Western Pacific.

I believe that the outlook for business and revenue of these western lines, for both the short term and the long term, is favorable. Business cycles and national and international conditions will naturally affect traffic volume for varying intervals, but, in the main, the trend of business and traffic in the area under consideration is moving steadily upward.

THE SHORT-TERM OUTLOOK

The short-term outlook has been improved within the last few days by the decision of the Interstate Commerce Commission in Ex Parte 175, granting the western lines an additional 9% increase in freight rates, with certain hold-downs. The increased rates went into effect May 2, except on grain, for which the effective date is May 17.

My optimistic outlook for business and revenue for these western railroads stems from several factors: the constantly and rapidly increasing population; the steady growth of industrial development; the expanding agricultural, forestry, petroleum and chemical developments; and our other abundant natural resources.

You gentlemen from the East and Midwest have a most interesting itinerary. You have already seen some of the developments that are taking place in the West and you will see much more on your inspection trips in central California, the Northwest, southern California and across

Frederic B. Whitman, president of Western Pacific, emphasizes a point to Lancaster Greene

George Shimmon

Arizona, New Mexico, Texas, and Louisiana. In all directions you will be impressed, I am sure, with the growth and development that has taken place and is in progress. I will venture the prediction that by the time you leave New Orleans for your homes you will be as optimistic as I am.

Passenger traffic is influenced to a large degree by the same general factors that affect freight traffic, including business conditions and the great growth of population and industry in the West and Southwest. That these factors have been favorable is indicated by the fact that, in spite of greatly increased private automobile, air, and bus competition, passenger business is increasing on the four lines under consideration. The reaction of these roads to this upward surge in passenger travel has been prompt and unanimous; each has appropriated millions of dollars toward the purchase of fine, modern streamline trains for operation on their main routes, and this has had a further stimulating effect on passenger travel in the territory.

POPULATION

The West has been experiencing great growth in its population for one hundred years. If we take California as an example, there is no indication of slackening in the rate of growth. California's population during the period 1900 to 1920 doubled; it doubled again by 1940, and by 1950 had increased 53% over 1940, for a total of 10½ million.

While the population of California increased 53%, that of Washington increased 37%, Oregon 39%, Nevada 45%, Utah 25%, Arizona 50%, New Mexico 28%, Texas 20%, and Louisiana 14%. During the same period the remainder of the population of the United States increased only 11%.

Some economists believe that this population growth in the western states is our greatest resource, and several forecasts point to an ever-increasing growth in population in the West. The Stanford Research Institute has estimated that California's population will be 34% higher in 1960, compared with 1950. If this is attained, it will mean that its population will have again doubled, 1960 over 1940.

Optimistic population forecasts are not unusual in a growing area. However, we have a forecast prepared by the U. S. Census Bureau for all the 48 states. It has prepared the increases on three levels: low, medium, and high. Considering in this instance the eight states served by Southern Pacific lines — Oregon, California, Nevada, Utah, Arizona, New Mexico, Texas, and Louisiana—the Census Bureau's projected increase depends on the increase for the United States as a whole, but on any one of the three estimates the forecast for the eight states is ahead of the Nation as a whole.

For example, if the population of the United States in 1960 is up 6.6%, the estimate for the eight states is 17.6%; if the U. S. figure is up 11.7%, the group increase is 23%; but, if the high estimate prevails and the gain for the Nation is 19%, then the eight states are expected to increase 31%. Expressed in numbers, the additional population for the eight states is expected to be 4,359,000 on the low side; and 7,706,000 on the high level. The last figure would be a little better than adding to the group of eight states another state with the population of California as it stood in 1940.

NATURAL RESOURCES

The population growth is tremendously important, but it alone is not enough. There must be employment, natural resources, manufacturing, and markets for products. Fortunate indeed are the West and Southwest with abundant raw material resources in petroleum and natural gas; in timber; in metallic and nonmetallic minerals; in coal, water, and hydroelectric power sources; and other natural resources. In addition, of course, are vast areas of rich agricultural land, livestock raising, and fisheries. These resources have always been present, but their development has been furthered by adequate transportation, increasing population, and market demands.

The economy of the West and Southwest was originally based on agriculture and mining. These subjects will be discussed later.

INDUSTRIAL DEVELOPMENT

The industrial development of the West and Southwest in the past twenty-five or thirty years has been very great and in the past five years has been phenomenal. This development may be divided into two types: (1) the location of warehouses and distributing plants, including assembly and subassembly plants, for manufactured products from other areas to serve the expanding markets of the West and Southwest, and (2) primary production plants for the conversion of the abundant raw materials available in the territory. Naturally the development has varied from industry to industry and from one company to another within the same industry. Important examples of assembly are the large automobile plants in central and southern California and in Texas, which are an important source of revenue to the rail lines.

Traffic for the rail lines stems not only from raw materials to the factory but also from goods in process of manufacture, as well as completed products. Perhaps the best indication of this growth of industry is to say that for the past twenty-five years an average of one new industry per day requiring spur track facilities has been located on Southern Pacific lines. Since World War II, 4,813 have been located along our lines, an average of two per day. These industries are of all kinds.

Though we have given figures for industries locating on Southern Pacific lines, a somewhat similar picture could be shown (we hope not quite so good) for our neighbors, the Atchison, Union Pacific, and Western Pacific, and other railroads in the Southwest. Southern Pacific figures are used to illustrate the point. I do not have the data for the others.

As shown in the Census of Manufactures, the value added by manufactures for all industries operating manufacturing establishments in the United States for the year 1950 as against the year 1939 increased 266%. The U. S. total, minus the western and southwestern states increased 257%. By contrast, the principal western and southwestern states, within the scope of our discussion, show the following increases, 1950 over 1939: Washington 316%, Oregon 415%, California 356%, Texas 406%, Louisiana 361%.

Other western states show similar growth although their volume was less. For example: Utah 310%, Idaho 298%, Arizona 305%, New Mexico 1,091%.

The states having the greater dollar value are California and Texas. California in 1939 had dollar value added by manufacturers of $1,122 million; this went to $5,121 million in 1950. Texas in 1939 had dollar value added of $448 million which in 1950 rose to $2,269 million. These figures clearly outline the tremendous over-all gain in production by western industries and the substantially greater rate of increase compared with the remainder of the United States. Notwithstanding this growth of production in the area, such production has not caught up with the population growth; consequently, the westbound movement of general traffic to supply the growing needs of the area has continued to increase.

To show more of what has been done in the West and Southwest, I shall discuss the growth of certain basic west-

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25c a share payable on
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Common Stock Dividend

The Board of Directors has declared a dividend, subject to the approval of the Securities and Exchange Commission, on the Common Stock, payable June 25, 1952, to stockholders of record at the close of business May 22, 1952. The dividend will be payable in shares of The Southern Company Common Stock at the rate of 4 shares for each 100 shares of Electric Bond and Share Company Common Stock. No scrip representing fractional shares of The Southern Company Common Stock will be issued to stockholders. The Company proposes to arrange for the Company's dividend agent to handle fractional share equivalents for the stockholders.

B. M. Betsch,
Secretary and Treasurer

May 14, 1952.

Nest-egg for Armco stockholders

This hard, black pellet is as small as a walnut. But it represents a big nest-egg for Armco stockholders — insurance against the day when present sources of iron ore in this country don't yield enough.

Richer in iron than most of the "natural" ores used in steelmaking, the pellet was produced from Taconite, a hard iron-bearing rock found in the northern part of Minnesota.

First the rock was ground into fine powder. Then the iron particles were extracted by a magnetic process. And finally these particles were shaped into a ball of iron ore ready for the blast furnace.

The development of this process means that Armco and another large steel company can tap a reserve of Taconite sufficient to produce over a billion tons of high-grade ore pellets — enough ore for generations to come.

It took four years of research — and an initial investment of three million dollars — to turn out the first pellet from a pilot plant. But the time and money have been well spent.

Armco Steel Corporation has been *planning ahead* for half a century. That's one reason why Armco is one of the world's leading producers of special-purpose steels. And it is promising assurance of continued growth.

ARMCO STEEL CORPORATION
Middletown, Ohio, with Plants and Sales Offices from Coast to Coast
The Armco International Corporation, World-Wide

ARMCO

ern industries and agricultural and mineral activities. Necessarily, the discussion will be brief, and only a few examples will be given.

STEEL INDUSTRY

Since the start of World War II the basic steel industry and the steel fabricating industry in the West and Southwest have undergone tremendous growth, with the addition of the large plant at Geneva, Utah (1,660,000 ingot tons annually), now part of the United States Steel Corporation; the Fontana, Calif., plant of Kaiser Steel; and the Sheffield Steel Company plant at Houston, Tex.

Before the completely integrated plants at Geneva and Fontana existed the West Coast was supplied with steel largely from eastern mills, mainly by movement through the Panama Canal, and from Pueblo, Colo., and Provo, Utah. Also it was supplied locally by plants in southern California, central California, and the Pacific Northwest, making steel from pig iron and scrap, including large plants of Bethlehem at Los Angeles, South San Francisco, and Seattle, and of Columbia Steel at Terrance and Pittsburg, Calif., all of which have been greatly expanded.

Consumption of steel mill products on the West Coast is now in excess of 5 million tons annually, an increase of 100% in the last ten years. Most striking is the steel ingot production, which has grown 371% since 1940. Notwithstanding its increased consumption, the West Coast now produces almost 60% of the steel it consumes, and this percentage is growing. By contrast, the figure in 1940 was 27%.

Kaiser Steel recently announced a program for a $65 million expansion of its Fontana plant, which will increase the ingot capacity to more than 1,500,000 tons annually. This plant operates on iron ore from California and coal from Utah.

The Texas steel industry is also of recent origin. The plant of Sheffield Steel at Houston has been increased in size so that it is now producing about 300,000 net tons of pig and ingot annually. An expansion program, now under way, will greatly increase this production.

In Texas there is also the Lone Star Steel Company at Daingerfield, which is being brought into production, and the construction of a $75 million steel mill was started by Lone Star last year. Upon its completion by the end of 1952 production of pigiron is estimated at 400,000 tons annually.

It may be thought that the establishment of such industries in the West and Southwest on a large scale might be detrimental to traffic prospects of the western railroads, local production being substituted for movement from eastern mills. However, as indicated earlier, a very large part of the steel formerly reaching the Pacific Coast moved through the Panama Canal, and into the Southwest through Gulf ports and via the Mississippi River so that the development of the steel industry in the West and Southwest has actually brought much new traffic to the western rail lines. This is evidenced by the fact that the four railroads we have been using as a guide, that is, the Atchison, Union Pacific, Southern Pacific, and Western Pacific, had a gross freight revenue in 1940 from iron and steel products of $18 million, whereas in 1950 the revenue was $88 million and in 1951, $114 million. These figures include iron and steel pipe which item I think warrants special mention as an example of fabrication activities, both in California and Texas.

Pipe is being fabricated at plants in central California, Los Angeles, and Houston, from which plants pipe has been moved in large quantities across the United States and into Mexico and western Canada for the construction of natural gas and oil pipe lines. The value of the growth of the pipe industry to the four western lines is illustrated by the fact that they had a gross revenue from iron and steel pipe in 1940 of $4,500,000, whereas in 1951 this had gone up to over $31 million.

In connection with the development of the iron and steel industry the movement of iron ore is of interest. This is an entirely new movement for the Southern Pacific. For example, in 1941 our lines handled only 63 carloads of this commodity, whereas in 1951 we handled 27,760 carloads. This new source of traffic and revenue will increase with the expansion of the Kaiser plant at Fontana.

In addition to the iron ore movement to the steel plants, it is of interest to note a substantial movement of iron ore through Pacific Coast ports to Japan, originating in California, Nevada, and Utah. This ore supplies the steel mills in Japan, their normal source on the Asiatic mainland being cut off. Over one thousand carloads are being handled each month by Southern Pacific. The development of the steel industry in the West is also reflected in the very large increase in iron ore movement by Union Pacific, statistics showing that in 1941 U. P. handled 7,885 carloads, whereas in 1951 they handled 83,355 carloads.

COPPER

The mining and refining of copper is a basic industry in the West and Southwest, the bulk of United States production being in this area. Mines and smelters in Arizona and Utah are the top producers, with substantial production in Nevada, New Mexico, and Montana. There are also large refineries at El Paso, Texas.

Copper is in short supply with producers working to capacity. There are under way a number of important projects to increase the production of copper, an example being Magma Copper Company's San Manuel project north of Benson, Ariz., on Southern Pacific lines. A recent press announcement indicates financing contemplated by Reconstruction Finance Corporation will exceed $100 million to develop this project, which is expected to produce about 70 thousand tons of copper annually. Another large project is at Yerington, Nev., on our lines, where Anaconda is opening a strip mine at a cost of about $38 million, with expected production of about 30 thousand tons of copper annually.

Phelps Dodge is spending about $25 million to develop a new pit at Bisbee, Ariz., which is expected to produce about 38 thousand tons of copper annually. In addition, Phelps Dodge is considering the opening of Burro Mountain Mine at Tyrone, N. Mex.

American Smelting and Refining is spending about $17 million on the opening of the old Silver Bell Mine near Red Rock, Ariz. Kennecott has compelted a large new refinery in Utah and is expanding its production at Ruth, Nev. The Miami Copper Company at Miami, Ariz., is also expanding its production. The copper industry is very important to western lines, and particularly to Southern Pacific, giving us a gross revenue in 1940 of $3 million and in 1951 of $6,400,000, involving movement of ore, concentrates, and copper.

ALUMINUM

Another industry that has shown phenomenal growth in the West and Southwest in recent years is the aluminum industry, with large plants and production in Washington, Oregon, California, Arizona, Texas, and Louisiana. This industry is expanding rapidly, particularly in Washington, Texas, and Louisiana, and is a considerable source of revenue to western lines.

FOREST PRODUCTS

Forest products are a principal source of revenue to the western lines today, and the standing timber in the states of Oregon, California, and Washington is one of the greatest natural resources of the Nation. There is also considerable timber in Idaho, Montana, Arizona, New Mexico, Texas, and Louisiana.

In 1905 Washington became the leading state in lumber production. In 1938 Oregon took the lead, and in 1948 California became the second state in lumber. Washington has held third place since that time. Of the saw timber remaining in the United States, over one half is in the Far West.

Although the industry is old, as age is measured in the Far West, it is still expanding. For example, the total cut in Washington, Oregon, and California of all species in 1940 was 11,655 million board-feet. In 1941 it was 13,883 million; in 1950 it was 16,092 million; in 1951 it was 16,189 million.

A recent development in the lumber industry that is of interest is the very large increase in the production of plywood. As an illustration, the four western railroads had a revenue from plywood in 1940 of $2,165,000. This jumped to $9,252,000 in 1950, and to $10,722,000 in 1951.

From the standpoint of production, the future of the lumber industry seems secure, at least for the foreseeable future. With the increasing activities toward sustained yield, selective logging, and reforestation by large producers and the U. S. Forest Service, the industry appears to be headed for the goal of a permanent supply of timber.

Also considerable experimentation and research is going on to develop means of putting to productive use many of the products of the forests that now go to waste. In recent years there has also been a substantial development of the pulp paper and wallboard industry in Washington, Oregon, and California, and in Texas and Louisiana. This industry is continuing to expand on a large scale.

PETROLEUM AND CHEMICALS

In the national picture, Texas, California, and Louisiana stand one, two, three in the production of petroleum, Texas being way out in front. Texas and Louisiana are the top two states in natural gas production. This, of course, is a tremendous asset to the area and the rail lines in the West and Southwest.

We are considering petroleum, natural gas, and chemicals together because they are closely related in the expanding chemical industry. The major oil companies generally have chemical subsidiaries or departments, and these oil companies are spending large sums for exploration, plant expansion, and research in both petroleum and chemical fields. To mention only a few, there are Standard Oil's California Research Corporation at Richmond, Shell Development Company at Emoryville, Union Oil Company at Brea, Associated Oil Company at Avon, all in California, and the new research centers of the Humble Oil Company and Texas Company at Houston.

Industrial development going forward in Texas and Louisiana, particularly in the petroleum and chemical fields, is tremendous. There have been recently constructed, or are in the course of construction or planning, some very large installations, mainly in the Gulf Coast area, extending for about 500 miles from Lake Charles, La., to Brownsville, Texas. If we are coming into the chemical age, as contrasted with the iron age, then the Southwest appears destined for greater development, possessing as it does extensive natural resources and relatively low-cost fuel.

To illustrate what is taking place in the Texas and Louisiana area, a survey was made by the South Texas National Bank of Houston in January of this year, covering new plant construction, and expansion of existing plants during the year 1951 and proposed construction announced for the year 1952. A total program was outlined costing $1,376 million. This includes oil refineries, aluminum plants, chemical plants, petrochemical plants, carbon black plants, synthetic rubber, salt, chlorine, ammonia, and nitrogen, among others.

To give you a picture of the size of some of the new installations, they are listed as representing an investment of from $2 to $100 million each, with several in the range of $50 to $100 million. These new installations, of course, are in addition to an already large industrial development in the fast-growing Texas and Louisiana area. Texas and Louisiana supply the Nation with refined sulfur.

Though the petroleum and chemical developments in Texas and Louisiana are very large indeed, these industries are also going forward in the West. Already-large oil refineries in San Francisco Bay area and in southern California are being expanded or revamped, and new products are being produced. Standard Oil of California in the past few years has built a new refinery at Salt Lake City, Utah, and Shell, in addition to expanding its plants in Louisiana, Texas, and California, is building a new ammonia plant at Ventura, Calif. Standard of California states that chemical products account for about 7% of the gross sales of finished products of the parent company and wholly owned subsidiaries. A comparable figure for Shell is 9%. The chemical industry on the Pacific Coast was originally founded on borax, boron, salt, soda ash, salt cake, potash, and similar products, of which large reserves remain, and the list of products has been greatly enlarged.

In the Pacific Northwest there has been substantial development in the electrochemical field, and developments are also occurring along these lines at Henderson, Nev.

Another item of interest is the new development of phosphate deposits in Idaho, there being three substantial projects under way; one by Anaconda Copper at Conda; another by J. R. Simplot Company, Westvaco Division of Food & Machinery Chemical at Don and Pocatello, Idaho, and the third by Monsanto Chemical at Soda Springs. All three are very large projects, Westvaco having recently completed its third and now constructing a fourth electric furnace for producing elemental phosphorus. This development should result in substantial traffic for western lines.

Westvaco has also opened a large deposit of trona near Green River, Wyo., which is converted into soda ash in similar fashion to the production of soda ash by American Potash and Chemical Corporation at Trona, Calif. American Potash and Chemical also has large production of potash at the Trona plant; there is similar large production at Carlsbad, N. Mex., by U. S. Potash and International Minerals and Chemicals companies, and also a substantial production at Wendover, Utah. The demand for potash as a fertilizer and as a chemical is growing, and further expansion of this industry is taking place.

The production of infusorial earth, a natural diatomaceous product, is being increased in the Lompoc, Calif., area.

AIRCRAFT INDUSTRY

The expanding aircraft industry, including its suppliers, is very important in southern California and in Washington and Texas. In addition to the freight traffic developed directly, this industry has large payrolls which indirectly are a source of freight traffic through markets created for all types of supplies.

I will not attempt to cover traffic resulting directly from the many military installations in the West and Southwest; it is sufficient to say that it is very large.

AGRICULTURE

Agriculture is, of course, the basic industry in the West and Southwest, with a large production of grains of all kinds, cotton and flax, fruits and vegetables of all kinds, livestock, dairy products, poultry, and so forth. Agricultural production and the food-processing industry based on it are showing a sound and steady growth to meet the needs of the increasing population in the West and Southwest and also to meet the growing needs of the increasing population of the Nation. The Nation is largely dependent on the West and Southwest for a wide variety of agricultural products, either fresh or in processed form.

The large grain-producing areas are in Washington, Oregon, California, Idaho, and Texas, with Texas being the leading producer in the area under consideration. California, along with Louisiana and Texas, produced nearly 80% of all the rice grown in the United States, California alone accounting for about one fourth.

Texas is the number one cotton-producing state of the Nation, and, surprisingly enough, California is now number two. It has only been in recent years that cotton has become such an important crop in California, Arizona, and New Mexico. These three states have had the greatest yield per acre and also have obtained the highest farm price per pound for cotton produced.

An interesting illustration of the mechanizing of farming activities in the West is the use of mechanical cotton pickers in California. In 1945 two mechanical cotton pickers were introduced in the San Joaquin Valley. In 1951 there were approximately 3,000 such machines in use in California.

Let us look now at perishables. In this over-all field the West and the Southwest largely satisfy the Nation's appetite with the very large production of fruits and vegetables—apples, pears, and berries in Washington, Oregon, California, and Idaho, with Washington being the number one state in apple production and California the leading producer of peaches, apricots, prunes, grapes, and other deciduous fruits, ably supported by Washington, Oregon, Idaho, and Utah. California, Arizona, and Texas account for about one half of the citrus fruit production.

California, Texas, and Arizona grow a very large percentage of the Nation's vegetables, such as lettuce, melons, carrots, spinach, cauliflower, celery, asparagus, tomatoes, and other green and root vegetables. There is also a substantial production of vegetables in Oregon, Washington, Idaho, Utah, and New Mexico. California, Idaho, Oregon, and Washington are the leading producers of potatoes in the West. Maine is the only state exceeding either California or Idaho in potato production.

As with agricultural products generally, perishable traffic of the railroads under consideration is showing a steady growth, as evidenced by carload shipments in refrigerator cars of the Pacific Fruit Express, which serves the Southern Pacific, Union Pacific, and Western Pacific, and the Santa Fe Refrigerator Dispatch, which serves the Atchison. These two car lines loaded on an average 495,000 carloads for the two years 1940–41. The average loading of the two years 1950–51 was 548,500 carloads, an increase of about 11%.

In the processing of agricultural products, California leads the Nation in production of canned fruits and vegetables, with large production also in Oregon, Washington, Idaho, Utah, and Texas. California again leads in dried fruits, nuts, and beans. There is also considerable production of dried fruits in Oregon, Washington, and Idaho. The relatively new industry of frozen foods and juices has taken tremendous strides in California, Oregon, and Washington.

Sugar is another food product of which the West and Southwest supply a large part of the Nation's requirements: from cane sugar in Texas and Louisiana, and from the Pacific Coast through refining of raw sugar from the Pacific Islands. The production of beet sugar is a major agricultural industry in California, Idaho, and Utah, with California being the leading producer.

The grape and wine industry is of great importance in California, which produces about 90% of the grapes grown in the United States. Tremendous tonnages of grapes either go into wine or are dried for raisins, and considerable quantity is marketed in the fresh state. Moisture conditions over most of the West and Southwest, resulting from heavy rains and snows of the last winter, justify a favorable outlook for this season's agricultural production.

In order to sum up what the products of agriculture mean to the railroads under consideration, let me say that 20% of their total freight revenue for 1951 is classified nder the heading of products of agriculture, plus 3½% assified under the heading of animals and animal prodcts. These percentages indicate that, though great develpments have taken place in other lines of activity, agriculre is still a leading industry of the West and Southwest. s previously stated, it is my opinion that this industry will ontinue to expand in volume and importance to meet the ncreasing needs of our country.

I have outlined in a general way what is taking place in e West and Southwest in the growth of our population, ur agricultural production, our industrial development, nd the development of our natural resources in minerals, orests, petroleum, chemicals, and the like.

In an effort to illustrate the effect of all of this progress n the Atchison, Southern Pacific, Union Pacific, and Westrn Pacific, I have drawn off the figures of ton-miles of evenue freight for the four roads on the basis of an averge of the two years 1951–50 versus an average of the two ears 1941–40. This shows that during the latest period e ton-miles of revenue freight for the four railroads in uestion increased 90%, whereas all other western lines ncreased 61%, and the Nation's Class I railroads, not inluding the four lines under consideration, increased 39%. think this clearly indicates the tremendous development hat has taken place and is continuing in the territory so ell served by these lines.

My conclusion is, as stated at the outset, that the outlook or business and revenue of these lines is good. The busiess is here, and it is increasing. You are keen observers nd skilled analysts, and you will, of course, reach your wn conclusions. But I feel sure that you will find many hings of interest to you in the West and Southwest.

We have enjoyed this visit and we hope you will come see us again soon. *(Applause)*

* * *

Chairman Bretey: Thank you, very much, Mr. McGaney. That was very interesting, indeed.

Our next speaker is Mr. Frederic B. Whitman, and I ould spend a long, long time expounding on the wonderful ontributions he has made to the railroad industry. We ll know that he has been one of the leading spirits of the ndustry, and I can't tell you how much pleasure it gives e to introduce him to you. Ladies and gentlemen, Mr. Whitman, president of the Western Pacific Railroad Comany. *(Applause)*

* * *

F. B. Whitman: Thank you, Mr. Bretey. Ladies and entlemen, the railroads of the West, during the decade ust past, have witnessed a very large growth in traffic origiating in and destined to their territory. They have not een content to attempt to meet this result of World War I and the intensive industrial development of the Pacific Coast with the equipment and practices of 1940. Had hey done so, few, if any, of them would still be in busiess—at least in private hands.

By the same token the railroads of the West have no hought of trying to handle 1960 business with what they ave today. Faced with subsidized competition in the air nd on the highways and skyrocketing costs of operation, the railroads know they must not let down for a moment in the constant search for better methods and streamlined operation. To do so would mean red ink.

RAILROADING TEN YEARS AGO

Let us look for a moment at railroading as it was only ten years ago, for there have been greater changes in this past decade than in the fifty years preceding. In 1942 practically all locomotives were steam, and, despite greater size and some improvements, they were not essentially different from those of fifty years before. Now Diesels have taken over to a rapidly increasing degree. Last year they handled 52.66% of the total ton-miles of freight for all American railroads, exceeding steam for the first time.

TRAIN ORDERS AND MORSE CODE UNIVERSAL

A decade ago train dispatching through train orders and Morse code was almost universal. It had been since the days of the Civil War. Today the proportion of mileage under traffic control systems is steadily growing. Switches and signals are operated from central control panels, and the traffic capacity of a single-track railroad approaches that previously of a double-track railroad.

Ten years ago there were streamlined trains, but only a few; there was no such thing as radio communication between yardmasters and the crews on switch engines; track work was done by the time-honored "Armstrong" methods. What a difference today! Maybe some of the glamour is gone, but glamour rarely pays off in profits, and you can't do today's job with yesterday's tools.

The developments I have just touched on and many others were vital to the financial health of Western railroads. For example, let us take Dieselization on the Western Pacific.

GREATEST FREIGHT REVENUES IN HISTORY

During 1951 we enjoyed the greatest freight revenues in our history, $51,500,000. We received this sum for handling slightly over 4 billion ton-miles of revenue freight. Our freight trains averaged 1,475 tons per train, and so this represented 2,811,516 freight train-miles. In 1941 Western Pacific freight trains averaged only 844 tons per train. So, if we had handled 1951 traffic with 1941 freight trains, 4,913,520 freight-train-miles would have been required, or 2,102,000 more than were actually needed. The out-of-pocket costs of operating freight trains in 1951 averaged $3.63 per mile. Thus it would have cost an additional $7,630,000 to handle 1951 freight traffic with 1941 freight trains. Considering that this figure is almost identical with our net railway income for the past year you can readily see where Western Pacific would have been had we not introduced Diesel locomotives, centralized traffic control, and the other measures that have been taken toward more and more efficient operation. Of course this is all a mathematical fantasy, as you well know, for, if we had not modernized, we would not be getting the business, but I think it does point up the absolute necessity of expenditures for increased railroad efficiency.

If we can't do today's job with yesterday's tools it follows that we shall not be able to do tomorrow's job with the tools of today. In full awareness of this axiom, the railroads have under way or planned huge expenditures that will enable them further to streamline their operations and keep in the van of progress, with dividends for their share holders despite constantly rising prices and subsidized competition.

SOUTHERN PACIFIC

Examples may be cited on every Western railroad. For example, on our neighboring Southern Pacific the extensive yard at Roseville is being changed from a flat switching yard to a hump yard with over 200,000 feet of additional trackage. This project alone involves the expenditure of $4,700,000 for car retarders, three control towers, two yardmaster towers, floodlighting, radio facilities, and the like. What are the advantages of a hump yard that makes this large expenditure desirable? Simply, less time lost in terminals; consequently, more efficient operation that will reflect in profits.

DENVER & RIO GRANDE WESTERN

The Denver and Rio Grande Western likewise has started work on a $4 million hump yard at Grand Junction, Colo. Plans call for 24 classification tracks with a total capacity of about 1,200 cars and six receiving tracks which will hold another 600 cars. This hump yard will also be equipped with car retarders, remotely controlled switches, and two-way radio communications with yard engines as far away as 13 miles from the yard. The improvements in operating efficiency and the opportunities for time savings which such an installation will make possible are obvious.

NEW 15.2-MILE CONNECTION

Another major improvement, which Southern Pacific has under way in the rapidly growing Los Angeles area, is a new 15.2-mile connection between Puente on the Sunset Route and their Santa Ana branch which will make it possible to by-pass the Los Angeles Yard at Taylor and the congested industrial district with cars destined for Los Angeles Harbor and surrounding industries. This by-pass line which involves 8.6 miles of new track and running rights over 6.6 miles of Union Pacific main line will cost $4,300,000. It will cut one day off the delivery time for all cars destined for the Long Beach–San Pedro area; the resulting improved traffic position of Southern Pacific, you may be sure, will be reflected in profits.

UNION PACIFIC

The Union Pacific too has major projects under way which will enable it to give better service and keep costs down. One such is the 42 miles of new track being constructed to by-pass the present double-track line over Sherman Hill just west of Cheyenne, Wyo. The present route, laid out in 1868, is 9 miles shorter but climbs to 8,014 feet on a 1.55% grade. The new track, which will be used for westbound ascending trains only, will have a maximum grade of 0.82% and a summit of 7,864 feet. It is Union Pacific's largest line relocation since the driving of the gold spike in 1869 and will cost an estimated $16 million. You can be sure the $16 million would not be spent by the Union Pacific directors, did they not feel sure that it would be more than returned in dividends.

Up in the Pacific Northwest which, industrial forecasters tell us, will experience the greatest growth of any part of the United States within the next decade, we find the railroads preparing to handle the increased traffic that may be expected with increased efficiency. Northern Pacific, for example, is installing two-way radio in its freight Diesels, cabooses, and wayside stations. Conductors on their trains, with the versatile equipment used, may talk directly with the dispatcher through unattended as well as attended land stations. Each locomotive and caboose so equipped carries about $2,500 worth of radio equipment, but the results will cut running time of 125-car through freights, facilitate cutting helpers into and out of trains, and aid engineers to co-ordinate their throttle settings and dynamic braking.

I could go on mentioning similar projects of western railroads indefinitely: the Union Pacific's $5,600,000 Diesel repair shop under way at Salt Lake City, its ten 4,500-horsepower gas-turbine electric locomotives which some think may be the beginning of a trend replacing Diesels, Southern Pacific's recent order for 188 new Diesel units, the Milwaukee's extensive reforestation program in Washington which combines being a good neighbor with planting future traffic; but the time grows short, and I should like to close with a few projects of the Western Pacific with which I am, after all, far more familiar.

WESTERN PACIFIC

Western Pacific, in addition to the steps that have been taken to provide tools of today for today's job at a cost of $52,342,000, has a long-range improvement plan extending through the year 1955 to convert them into the tools of tomorrow. The total costs of this program covering the years 1951 to 1955 are estimated at $51,540,000. If inflation continues, they will be higher.

Largest of the items in this plan is that of equipment—$22,750,000. Only $4,740,000 of this is for Diesels, as Western Pacific is already almost completely Dieselized. The early beginnings (W.P. was second only to Santa Fe in initiating the use of road Diesels) and rapid progress of Dieselization have been of immense benefit to Western Pacific, if you will recall the mathematical fantasy with which I began this talk. However, complete Dieselization means also that this avenue is removed as a possible source of further improvements and that other means must be used to an even greater degree.

So, of the new equipment which Western Pacific proposes to purchase during this five-year program, $836,000 is for mechanized track maintenance equipment and off-rail earth-moving machinery. By the use of this modern equipment instead of work trains, combined with the reduction in total number of sections which the advent of full timber treatment, heavy rail, tie plates and rail anchors, crushed rock and slag ballast, and motor car maintenance has made possible, roadbed costs can be reduced 50%.

HEAVIER RAIL REPLACEMENTS

Getting back to the $51 million improvement plan, $9,290,000 is earmarked for new heavier rail replacements and $1,540,000 for ballast that will maintain the railroad in a condition to handle freight and passenger trains at competitive speeds. A total of $5,100,000 is set aside for signals, of which the major amount is for centralized traffic control, now renamed traffic control systems. The expenditure of this amount will complete the TCS installation on the entire main line between Oakland and Salt Lake City, except the paired track in Nevada where modern three-position light signals are replacing the old semaphores, and on the Northern California Extension between Keddie and Almanor.

REFLECTED IN FUTURE PROFITS

These are some of the principal expenditures which we expect will be reflected in future profits. Of equal importance are improved operating methods. Although we maintained first place last year among all railroads serving the Pacific Coast under four recognized indices of operating efficiency—namely: (1) gross ton-miles per train-hour with a figure of 69,442; (2) net ton-miles per car-day, of which our average was 1,846; (3) car-miles per car-day, with our average 83.9, and (4) train-miles per freight-train-hour, with an average of 22.2—we are cognizant of plenty of opportunities for constant improvement. Delays at terminals can be further reduced. Longer sidings will permit more nonstop meets. Two-way radio communications with yard engines, which we have already installed at San Francisco, Oakland, Sacramento, and Stockton, will reduce the time in making up trains.

FREIGHT 95% OF BUSINESS

Freight is 95% of our business, but any discussion of the outlook for railroad profits would be incomplete without mention of passenger service. Unprofitable passenger trains for which the need no longer exists have been one of the largest financial leaks. Sometimes it is truly astounding what opposition is aroused at a railroad's proposal to take off a train which practically no one rides on. However, distinct progress is being made in this field, Southern Pacific having been particularly successful in securing commission approval in eliminating unneeded passenger service.

PASSENGER TRAINS SOURCE OF PROFIT

Freed of these leeches, passenger trains can be a source of profit. We at Western Pacific not only are very proud of the vista-dome California Zephyr on which I know many of you are frequent riders, but we are proud that this train makes a profit, and also that our over-all passenger service is in the black.

Net earnings on Western Pacific passenger service during 1951 on an out-of-pocket basis amounted to $969,393. Of this the California Zephyr profit was $794,286. What prevented this profit from being submerged in red ink was the fact that two years ago we were successful in eliminating the conventional train, which rendered local service at a loss of roughly $1 million yearly, and replaced it with a service using single-unit Budd Diesel cars. Although the Budd cars ran at an out-of-pocket loss of $156,800 for the year, the service is a necessity, and the reduced loss has made possible the over-all profit.

The subject that was assigned to me is "The Outlook for Profits," and I have tried to talk on a few of the factors that affect this outlook without trespassing on Mr. McGanney's subject of "The Outlook for Revenues" which, after all, is the main factor in profits. But there is one more factor on which I wish to touch before closing. That is taxes.

TAXES

Regardless of how much traffic, freight and passenger, our solicitors are successful in securing for the railroads and regardless of how much money we are able to save by Dieselization, mechanization, CTC, and what have you, there will be no profits if taxes continue to ride like unguided missiles toward the stratosphere.

For our annual report to share holders covering 1951 operations we made a little study of the comparison between what the government—local, state, and Federal, but principally the latter—was getting from our business compared with what the owners received for the hire of their investment capital.

We found that during the past seven years total taxes paid by the company amounted to $41,387,854 while the owners received in dividends $19,323,808 or less than half. That is a bad enough average, but, if we take 1951 alone, taxes were $10,998,966 against dividends of $3,031,805. The owners got less than one third as much out of a very successful business year as the tax collector did. The trend is obvious.

But even this dismal picture does not quite reflect the true situation. For out of the already taxed-into-the-ground profits that the share holder does receive he must pay another personal income tax. If we assume for the sake of conservatism that all Western Pacific share holders are in the lowest income tax bracket, another $618,488 out of revenues found its way to the tax collector in this manner, leaving what might be called "take-home dividends" of $2,413,317 to the owners, while the Government took a grand total of $11,617,454, or almost five times as much.

PLENTY OF PROBLEMS

There are plenty of problems facing the railroad industry in its struggle to maintain a bright outlook for profits. Those that fall within the province of railroad management can, I am confident, be solved. The problem of taxes, however, is a universal one threatening not only the railroads but all of industry, and what we are still unable to find a better term for than the "American way of life." Congressional action as a result of overwhelming public demand appears to be the only hope of meeting this situation, and in this demand I wish to enlist your aid. *(Applause)*

* * *

Chairman Bretey: Thank you, very much, Mr. Whitman. That certainly was a very fine address.

Now, ladies and gentlemen, I have the privilege of bringing you one of the most brilliant railroad analysts in the country today. He is going to be our summer upper. It gives me great pleasure to introduce my good friend, David A. Hill from Chicago. *(Applause)*

* * *

David A. Hill: Mr. Bretey, Mr. McGanney, Mr. Whitman, and ladies and gentlemen. Several years ago when the Bangor & Aroostook had placed an order for its first Diesel locomotives and they had not yet been delivered, the management became a bit concerned about the cost and design of a Diesel shop. The road was too small and its resources too small to require a large and very expensive installation as had already been constructed by the Santa Fe and the Burington, and they wanted a modern running repair shop that would cost no more than $500,000. Therefore, they sent their chief engineer and their master mechanic to Chicago and asked me to escort them about the Midwest to a few shops whose cost would be within their means.

When the journey was ended and we happened to be in the LaSalle Street Station right in the midst of the evening rush hour, the master mechanic became fascinated with the frequency of train movements, and with the vast army of people filing by, which was so different from any railway terminal in the state of Maine.

MAN WITH THE WORRIED LOOK

After some 3,500 people had filed by, he said: "There goes a railroad man." And, after about 1,800 more had passed, he said again: "There goes a railroad man." Then later on he made the same remark again. I was amazed and asked him if he knew those people. He said: "No, I have never seen them before." Then I said: "Well, if you do not know the man, how do you know he is a railroad man?" And he promptly replied: "Because he has that worried look on his face." *(Laughter)*

Well, ladies and gentlemen, you are now looking at a man who has that worried look, which is probably my principal qualification for appearing on this railroad forum. *(Laughter)*

WILL NOT GILD THE LILY

At first, I was asked to read the papers, or listen to the reading of the papers by Messrs. Whitman and McGanney and then restate their messages into the jargon of an analyst, or perhaps summarize them in words of one and two syllables so that I would understand them, but they have spoken in English, their message is clear, and I will not try to gild the lily.

OPTIMISM A DRIVING FORCE

Mr. McGanney's optimism is interesting for it was the optimism of pioneers that was the driving force leading the original settlers and the prospectors. The spirit of daring still exists. His reference to perishables makes me hungry, and so I shall be very brief.

I will say, however, that for several years I have stressed the importance of good management, and have sought far and near for evidence of superior management. This morning we have had two examples of good management.

If anybody thinks this is just flattery, let us look at a few figures. By the way, I got some of these figures from a study made by Herbert Wyeth and others from a study made by Pierre Bretey, and I dug up a few of the figures myself.

Back in 1941 the average of Class I roads brought down 21.9% of railway operating revenue to net railway operating income, before income taxes, and by 1951 that percentage had degenerated to 14.5% before income tax, owing of course to higher wage and material costs.

Now, then, in 1941 the Western Pacific brought 19.1% of gross down to net, which was a little below the average of Class I roads, and in 1951 it brought down 27.6%, which was far above the average of the industry and higher than the industry had been in 1941. It is unfair to compare such percentages of one road with another, unless we know a great deal about them, or know that they are comparable, but we can compare one road with itself, which is exactly what I have done.

IMPROVED FACILITIES AND TECHNIQUE

Mr. Whitman's paper was centered around improved facilities and improved technique, and, when we witness the proof of the pudding, it spells out in large letters that the railroad is blessed with fine management, which in itself is as important as Diesel motive power and traffic control systems.

GOOD LEADERSHIP IMPORTANT

I hope Mr. Whitman will not be embarrassed by those remarks, but we are here to learn facts, and I consider it important indeed that we place our investments in companies that have good leadership. Both Mr. Whitman and the annual report of the Southern Pacific, as well as many others, refer to gross ton-miles per train-hour as accepted evidence of efficiency, and it is widely used and important. But, in addition, and more important is gross ton-miles per train-mile, because that puts money in the bank. You might increase gross ton-miles per train-hour without any operating saving by running trains of the same tonnage at higher speeds, and it might improve the service and perhaps create some business and increase earnings somewhat as a result. But, if you can haul more ton-miles with the same train-miles, or, better, haul more ton-miles with fewer train-miles, that rings the cash register. Still better, if possible, haul more ton-miles with fewer train-miles and do it faster; then you make substantial savings and provide superior service at the same time—and this can be done and has been done with intelligent use of Diesel power. Therefore, it is the combination of these economical tools and alert and intelligent use of them that makes the difference between a good management that copies what is up-to-date and a superior management that leads the parade.

GROSS TON-MILES PER TRAIN-MILE

You will be interested in knowing that gross ton-miles per train-mile for Southern Pacific has been 2,987, and for Western Pacific the figure is 3,153. In quoting the percentage of gross brought down to net for Western Pacific, the maintenance ratio was not a factor, as the ratio was about the same in both years.

In 1941 the Southern Pacific brought through 19.8% of gross, a little below the industry average; in 1951 it brought down 13.4%, again slightly below the average of Class I roads; but the maintenance ratio was a factor we should note, as the maintenance ratio was 5.8% greater in 1951 than 1941, and, if we adjust for that difference and use the ratio of 1941, we will find that the Southern Pacific had gone from 19.8%, a little below the industry average to 19.2%, which is distinctly above the industry average. Another way of stating this is that, in a period when the industry had degenerated from 21.9% to 14.5%, the Southern Pacific Railroad had been kept on approximately the same level.

NOT COMPARABLE ROADS

I will hasten to point out that the Western Pacific and the Southern Pacific are not comparable roads for several reasons; one of them has the great mileage of light-density lines of the Southern Pacific and also the commuter business in San Francisco and the road's large passenger fleet. Moreover, the Western Pacific does have some light-density originating lines, but they are separate corporations and do not dilute the operating figures of the parent company. I refer, of course, to the Sacramento Northern Railway and the Tidewater Southern. Another factor of some importance is relative size. It is a much simpler problem to watch the daily operations of a small road than of a great system like Southern Pacific. In fact, the large system is in a sense a bureaucracy; it takes a longer time for local problems to reach the main office and decisions to percolate down to the branches. However we can compare the S.P. with the S.P., and the W.P. with the W. P., and, when we do that and note the relative comparison with Class I roads, they both look very good indeed.

IMPORTANT TO STOCK BUYER

The point that I make about fine management is much more important to the stock buyer and the in-and-out trader than it is to institutional buyers of long-term bonds. If you recommend a bond due in fifty years, ask yourself who will be running the railroad when the bond matures, and, if you find out, tell me because I would like to know. Unless the president of a railroad has a very heavy investment in his own road, such as Mr. Deramus of the Kansas City Southern, he may find himself drafted by another carrier at a larger salary. That is a serious matter if the road is a one-man railway. But there are cases where the excellent management purposely builds up a second team, and I know of one carrier where a third team is learning the business.

To sum this up, I wonder if, when Mr. McGanney was asked to talk about the "Outlook for Revenues" and Mr. Whitman was requested to discuss the "Outlook for Profits," somebody had in mind that the former would provide us with the gross revenues of each western carrier and the latter with the net profit of the same carriers. Then we could divide the net by the number of shares and have the 1952 earnings in May! That I should like to have! *(Laughter and applause)*

* * *

Chairman Bretey: Thanks, Dave, that was fine, as usual. Ladies and gentlemen, we have already run over our time, but I want to thank our speakers for their fine talks here today. Thank you all for being here, and we will now adjourn until next year. *(Applause)*

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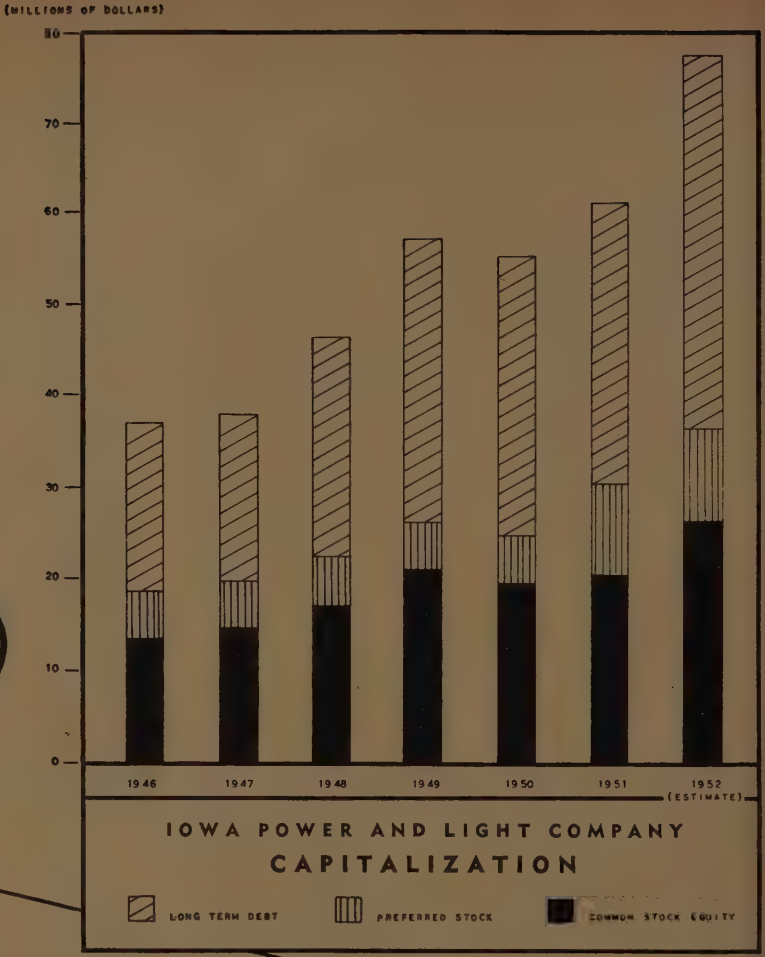

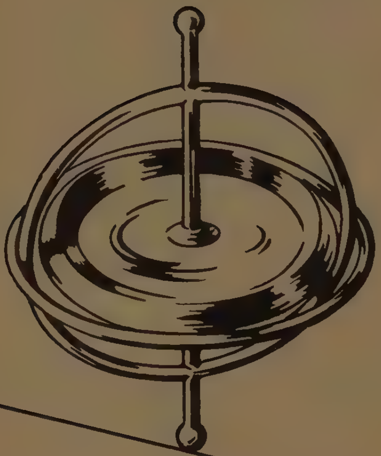

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George Shimmon

Pacific Coast utilities forum *(left to right):* Carl C. Brown, Robert A. Hornby, James B. Black (speaking), Marvin Chandler, chairman, and Thomas W. Delzell

Pacific Coast Utilities

MONDAY MORNING, MAY 5, 1952

MARVIN CHANDLER, Reis & Chandler, Inc., New York, presiding.

Chairman Chandler: Ladies and gentlemen, welcome to the Pacific Coast Utilities forum. To our speakers this morning we are doubly indebted, both for addressing us here now, and for their generous hospitality to be extended to us on field trips later in the week.

Our first speaker, whose company has raised more postwar capital than any other electric utility, is a graduate engineer from the University of California. Except for a few years in the early '30's as vice-president of the North American Company, he has been with the Pacific Gas and Electric Company or its predecessors ever since 1912, the last sixteen years as its president. Among his many other diverse distinctions, he is a member of advisory councils to the U. S. Interior, Commerce, and Treasury Departments; a trustee of Stanford University; and governor of the San Francisco Symphony and Civic Ballet Associations; a director of United States Steel, Shell Oil, Southern Pacific, Equitable Life, and Fireman's Fund Insurance, but we will have no questions on those today, please. Ladies and gentlemen, addressing us on "California Utilities, Their Growth and Outlook," Mr. James B. Black. *(Applause)*

* * *

James B. Black: Mr. Chairman, ladies and gentlemen, it is with a great sense of pleasure and some trepidation that I accepted this opportunity. In fact, after being cross-examined by some of you fellows, I feel very much like the young lady that went into the drugstore to buy herself a bottle of perfume. After looking over all the labels, "Follow Me, I Surrender, Indiscreet, My Sin, Intoxication," she sidled up to the clerk and said, "Haven't you got something for the Beginner?"

My pleasure arises from the fact that many of you are my personal friends and from the knowledge that as a group you exert a great influence in the realm of public utility finance. My trepidation is due to the realization that you are masters in your field and that I approach you on a subject on which you have a vast store of information and experience. We are honored by your presence here and we welcome the opportunity to acquaint you with the problems and progress of this area and hope that you will enjoy the inspection tours of our properties and will find them a source of great interest and information.

SUFFERING FROM GROWING PAINS

At the beginning of the second century of California's statehood, we are suffering a little from growing pains. The state's public utilities, during the past six years, have been almost constantly in the market for new capital to make up for war-imposed plant deficiencies and to keep ahead of the rapidly expanding needs of population growth and industrial and agricultural development. This area is the geographical center of the fastest growing region in the United States. Never in the history of this country, and perhaps never in the history of any other country, has there occurred a migration of population comparable in numbers to that which we have experienced in the last decade.

At the beginning of the present century California ranked twenty-first among the states in point of population. In 1940 it was in fifth place, and in 1950 it ranked second. It is entirely possible that many in this room will live to see California surpass even the great State of New York. In the decade ending in 1950 alone more than 3½ million persons were added to our population, an increase of 53.3% compared with only 14.5% for the Nation as a whole.

UTILITIES PARTICIPATED IN EXPANSION

The state's utilities, of course, have participated fully in this vast expansion. In this connection you may be interested in a survey recently made of the postwar development, from 1945 through 1951, of the six major electric and/or gas companies opertaing in California. The companies surveyed were the California Electric Power Company, Coast Counties Gas and Electric Company, Pacific Gas and Electric Company, Pacific Lighting Corporation, San Diego Gas and Electric Company, and Southern California Edison Company.

In that six-year period these half-dozen companies added more than 800,000 electrical and 900,000 gas customers, a growth of 41.5% and 43.7%, respectively. At the close of 1951 service was being rendered to a total of 2,730,000 electrical customers and 2,976,000 gas customers.

Deliveries of electricity by these companies advanced from 13.0 billion kilowatt-hours in 1945 to 22.4 billion kilowatt-hours in 1951, an increase of 72.3%. In the same period the volume of gas sold increased from 301 billion cubic feet to 474 billion cubic feet, a gain of 57.5%.

Gross operating revenues last year aggregated $580 million, an advance of almost 80% over the corresponding total of $324 million in 1945.

RATE INCREASES GRANTED

Since 1945 rate increases, principally for gas service, aggregating $43,600,000 on an annual basis have been granted these utilities. Several applications for further increases in both electrical and gas rates are now pending, and others will doubtless be filed in due course.

In the period 1945 through 1951 these utilities have expended more than $1 billion on additions and improvements to electric facilities, and $400 million on their gas properties. To finance this construction, they have marketed slightly over $1 billion of securities. Approximately 39% of their gross capital expenditures were financed from the sale of bonds, 17% from preferred stock, 15% from common stock, and 29% from internal sources.

Ownership of these companies at the close of 1951 was vested in 355,000 stockholders, an increase of almost 89,000 in six years. A substantial majority are residents of California. The number of local owners has increased in recent years, reflecting the confidence of California investors in these companies and establishing a valuable public interest in their future welfare. These statistics present a picture of unusually rapid growth, adequately and successfully financed.

I believe it appropriate, now, to bring to your attention four other subjects which are of considerable current interest to security analysts: the gas supply in California, the development of additional electric generating capacity, the impact on our local utilities of Federal power projects, and the regulatory climate in which our companies operate.

CENTENNIAL OF GAS COMPANY

The year 1952 marks the centennial of the incorporation of the San Francisco Gas Company, the first company in this state to undertake gas service and also the first unit of the present Pacific Gas and Electric Company's system. It is a far cry from the flickering gas lamps of the days of the gold rush to the widespread natural gas systems of today. San Francisco's first gas, 525 Btu, was made from coal brought from Australia. It sold at $15 a thousand cubic feet. Today over 99% of all gas consumed in California is straight natural gas, with an average British thermal unit content of 1,060. It is selling at an average price of 48.5 cents per thousand cubic feet.

4TH AMONG NATURAL GAS STATES

California ranks fourth among the natural-gas-producing states of the Nation with current production of approximately 500 billion feet annually. Its recoverable reserves are now estimated at about 9½ trillion cubic feet.

Until five years ago all natural gas used in California was produced within the state. But, with the tremendous expansion of fuel requirements during and after World War II, without discovery of large new reserves, it became necessary to draw on out-of-state sources to supplement local production.

Beginning in 1947 natural gas from West Texas was made available in southern California, and by 1950 gas from Texas and New Mexico fields was brought into Northern California. The growth in demand has been so rapid that during 1952 about one half of all gas supplied to the 3 million gas customers in this state will come from out-of-state sources.

800 MILLION FEET DAILY

At the present time deliveries of natural gas at the California border through the pipe lines of El Paso Natural Gas Company approximate 800 million feet daily. Deliveries are divided about equally between the Pacific Gas and Electric Company in northern California and the Pacific Lighting subsidiaries serving the southern part of the state. Within a year it is expected that 300 million feet more will be available to these companies on the same basis. Plans for the importation of additional amounts are under way.

PROGRAMS FOR ADDITIONAL CAPACITY

Programs for additional electric generating capacity, deferred by the War Production Board during World War II were re-established and expanded immediately after wartime restrictions were removed. It soon became obvious that even these large programs would be inadequate, and they were further expanded and accelerated. High-efficiency steam and hydroelectric projects were rushed to completion in the face of postwar delays and dislocations. Steam took first place because of the necessity of providing a balanced and dependable supply in dry years.

WIDE FLUCTUATIONS IN PRECIPITATION

This area, which is semiarid, experiences wide fluctuations in annual precipitation. Even with large carry-over storage in our reservoirs hydroelectric production is severely reduced in dry years. During such periods steam plants must be operated at high load factors.

Undeveloped hydroelectric power in California is not large in relation to the rapid growth in demand. Except for a few good sites which soon will be developed, the remaining hydroelectric power is becoming progessively inferior in quality. Some by-product hydroelectric power will, of course, be available from water supply projects yet to be developed. However, it is apparent that to an increasingly greater extent the state must rely on the use of steam-generated power. It is quite possible that after 1960 substantially all of the growth will be taken care of by steam.

USE OF ATOMIC POWER

My company, in co-operation with the Bechtel Corporation and under the direction of the U. S. Atomic Energy Commission, is studying the use of atomic energy for industrial power production. Although progress is being made, it is not likely that economic commercial operation will be achieved in the immediate future.

Since 1945 investor-owned utilities in California have added 1,949,000 kilowatts in generating capacity—431,000 kilowatts of new hydroelectric power and 1,518,000 kilowatts of steam. In the same period Federal hydroelectric installations in California and on the lower Colorado River totaled 525,000 kilowatts.

Construction planned for the next three or four years is comparable to that completed in the postwar period. The privately owned utilities contemplate additions of 1,865,000 kilowatts, and the Federal Government 409,000 kilowatts, a ratio of more than four to one in favor of private power.

In some quarters there appears to be a tendency to overemphasize the relative magnitude of the Federal projects in this area in their relation to the over-all power requirements of the state. We certainly do not underrate them as a potential threat, but in our opinion there is no occasion under present Congressional policy to have misgivings about our ability to live with them.

FIRST FEDERAL PROJECT

The first of these Federal projects was authorized by Congress in 1928 and is located on the Colorado River in the states of Nevada, Arizona, and California. Three plants utilize the waters of the Colorado. The largest, at Hoover Dam, is designed to permit installation of units aggregating 1,327,500 kilowatts. Already 1,030,820 kilowatts have been installed and 215,000 kilowatts more are under construction. The other two projects, Davis and Parker dams, have been fully developed to their ultimate capacity of 325,000 kilowatts.

DISPOSED OF UNDER LONG-TERM CONTRACTS

Power generated on these projects is disposed of under long-term contracts with various agencies, public and private, in Nevada, Arizona, and California. The Southern California Edison Company for many years has been the recipient of the largest block of Hoover Dam power allocated to any private utility. Yet that company received from this source last year only 12.5% of its total power output.

The other Federal development is the Central Valley Project in northern and central California. It was authorized in 1933 as a state water project, but construction was subsequently undertaken by the U. S. Bureau of Reclamation. Hydroelectric generation facilities at Shasta and Keswick dams, both on the upper Sacramento River, have been completed, with a rated capacity of 450,000 kilowatts. Additional generating units with an aggregate capacity of 175,500 kilowatts have been authorized for construction on the American River, a tributary of the Sacramento. When completed, this installation will bring the presently authorized electric plant capacity of the Central Valley Project to 625,500 kilowatts.

As a measure of relative size, I would like to point out that the Pacific Gas and Electric Company alone in 1950 and 1951 placed in operation new electric generating units aggregating 950,000 kilowatts. This is 1½ times the rated capacity of the present and proposed Central Valley plants. I would like to have you note further that, when the Central Valley Project is completed according to its present program, it will have only 14% of the installed capacity contributing to the power supply of northern and central California.

By the close of 1954 my own company plans to have in operation hydroelectric and steam plants with a total capacity of 4,150,000 kilowatts. Our capacity will then approximate the combined installations, constructed and authorized, of all the great Government projects on the Pacific Coast: Grand Coulee, Bonneville, Shasta, and Hoover dams.

SETTLED A CONTROVERSIAL ISSUE

We hope that we have settled a controversial issue of some years' standing with respect to the disposition of Central Valley power. In 1951 we executed two co-operative ten-year contracts with the U. S. Bureau of Reclamation. Under one of these, a so-called wheeling contract, we agreed to accept delivery of project power into our system and, at the Bureau's request, deliver an equivalent amount after transmission losses, to Federal establishments and certain customers entitled to preference under the reclamation law.

The second contract provides for the sale to the company of such project power as the Bureau does not need for its own use or for its preferred customers. It is estimated that the Bureau will require at least 125,000 kilowatts for pumping purposes. At present the company is providing wheeling service to 14 customers of the Bureau, having an aggregate maximum demand of about 35,000 kilowatts. The approximate demand of preferential customers in the area entitled to wheeling service is about 200,000 kilowatts.

SAVING IN POWER COSTS

The two co-operative contracts I have mentioned will permit a considerable saving in power costs to the company over the arrangements formerly in effect.

In this connection, it may be noted that the 1952 Interior Department Appropriations Act provides that no part of the appropriation made in that Act for construction of reclamation projects:

> . . . shall be used to initiate the construction of transmission facilities within those areas covered by power wheeling service contracts which include provision for service to Federal establishments and preferred customers, except those transmission facilities for which construction funds have been heretofore appropriated, those facilities which are necessary to carry out the terms of such contracts or those facilities for which the Secretary of the Interior finds the wheeling agency is unable or unwilling to provide for the integration of Federal projects or for service to a Federal establishment or preferred customer . . .

This declaration of policy has been incorporated in the 1953 Interior Department Appropriations Act, which has passed the House of Representatives and is now before the Senate.

Bureau of Reclamation requests for appropriations for a steam plant have been six times denied—four times for construction and twice for studies.

We are heartily in favor of the development of water conservation projects by state and local agencies or by the Federal Government. We further believe that, wherever economically feasible, by-product power should be developed on these projects in order that the cost of water and the burden on the taxpayers may be reduced to a minimum. We do, however, most earnestly object to any governmental agency using these projects as a means of establishing itself in tax-free competition with taxpaying enterprises financed by the savings of its citizens.

Now, a few words about regulation. We recognize that every informed person attaches considerable importance to the regulatory climate, and rightly so. Expansion of capital investment should be accompanied by a growth in earnings sufficient to provide equitable treatment of investors and to attract capital on favorable terms.

FEDERAL POWER COMMISSION

Several of our gas and electric utilities are subject to regulation by the Federal Power Commission. In fact, because of the very large Federal ownership of lands in California, it is practically impossible to construct a hydroelectric power project without obtaining a license from the FPC. I think the Pacific Gas and Electric Company holds more licenses from the Commission than any other utility. There is also some transmission of electricity across state lines which results in a measure of rate regulation by the FPC. The importation of gas from Texas is subject to Federal Power regulation. In general, the relations of the California companies with the Federal Power Commission have been good. Some differences of opinion, of course, have arisen, but they have been, or are being, resolved without unusual difficulties.

STATE REGULATION FOR 40 YEARS

Our utilities have been under thorough and progressive state regulation for forty years. During this long period the utilities have grown and prospered and have successfully financed tremendous building programs needed to keep ahead of expanding service requirements. This in itself is the best proof of the soundness of regulatory policies and practices in California. I know of no instance in the past quarter century in which needed expansion has been prevented or even seriously delayed by lack of capital funds. In my company more than 90% of its properties have been constructed or acquired under regulation of the Commission. All of its outstanding bonds and more than 90% of its outstanding stock have been issued under authority of the Commission.

POLICIES ENLIGHTENED AND PROGRESSIVE

Regulatory policies generally have been enlightened and progressive, but I do not intend to imply that all decisions of the California Commission have been found acceptable to the individual companies. Such a Utopian condition is hardly to be expected. Differences have arisen, but in my opinion, which is based on an experience practically identical with the period of state regulation itself, the members of the California Commission have been for the most part hard-working, conscientious men, alert to the large measure of responsibility resting on them.

Long delays in the hearing and disposition of some proceedings, notably rate cases, have occurred, due primarily to a very heavy work load, and no doubt some errors in judgment have been made. However, I have always found the Commission co-operative and willing to correct errors when they have become apparent. I believe that our utilities will continue to develop and prosper and provide an attractive medium for investment of large amounts of new capital.

PROBLEMS NOT INSOLUBLE

The utility industry in California as always has many problems, but we do not regard any of them as insoluble. The demagogue and the socialist will always be with us, but I think we can rely, as we have relied in the past, on the informed and sound judgment of the people we serve. *(Applause)*

* * *

Chairman Chandler: Thank you very much, Mr. Black.

Our second speaker was not born in the Far West, but got his call at the age of four, when he arrived at Klamath Falls, Oreg., by stagecoach. After studying engineering at Oregon State, he worked for the California-Oregon Power Company, and subsequently became Assistant Public Utilities Commissioner of Oregon in the late '30's. From 1939 to 1948 he was one of two independent trustees in charge of the reorganization of Portland Elecrtic Power, the bankrupt parent of Portland General Electric. He was instrumental in solving the difficult legal, financial, and operating problems there involved and in preparing the successful reorganization plan whereby the creditors, who had seen their bonds quoted in the '20's, were paid par and all back interest; and the first preferred, which had sold at a dollar in 1939 and 1940, realized par and arrears, a total of over $109 per share. It is obvious that he could teach us a lot about security analysis. Since the reorganization, our speaker has been a very active chairman of the board of Portland General Electric. He has just finished a term as president of the Northwest Electric Light and Power Association, is a director of the National Association of Electric Companies and a trustee of Pacific University, and is active in community affairs. Speaking to us on "Power in the Pacific Northwest," Mr. Thomas W. Delzell. *(Applause)*

* * *

Thomas W. Delzell: Mr. Chairman, ladies and gentlemen, as your guest here from the Pacific Northwest, and therefore sort of an unofficial electric utility in this area, I should like, first, to welcome you to the West. We are delighted to have you here. We appreciate fully the important part that analysts play in the security markets that affect us so deeply. We are looking forward to the trip this weekend of some 40 or 50 analysts to the Pacific Northwest. I trust they will thoroughly enjoy this trip, just as much as we enjoyed it last year when about nine of you analysts came as our guests to Portland last February, and just as we enjoyed it when a few of us came down to participate in a conference sponsored by the San Francisco Society in San Francisco earlier this year. It was a particularly fine affair. I should like to compliment the San Francisco Society on that job well done.

It is a pleasure to appear before you today and discuss the topic of "Power in the Pacific Northwest." The Pacific Northwest is a big country and the subject complex. Consequently, it cannot be fully covered in a brief space of time, and my remarks must therefore be considered as merely hitting the high spots.

COST OF CAPITAL MAJOR ITEM

It is not necessary for me to remind you that the cost of capital is a major item in the operation of any utility business. We in the Northwest believe that our securities are downgraded unduly because of some misconceptions and overemphasis that has been placed on our problems. And, as a consequence, our capital costs are high in comparison with utility securities of like quality originating from other sections of the country.

BONNEVILLE POWER ADMINISTRATION

It was approximately fifteen years ago that Bonneville Power Administration was created, with the responsibility of marketing at wholesale the power output of Bonneville Dam, which was then nearing completion. Shortly thereafter it became the authorized sales agent for the output of Grand Coulee Dam also. It is no secret that during that fifteen-year period, and particularly in the late 1930's and early 1940's, the national administration sponsored a strong and vigorous effort to convert the electric utility operations in the Pacific Northwest into public ownership. The effort failed.

In my opinion, region-wide public ownership in our area can only be accomplished by some sort of national legislation which would convert the entire Nation into several regional authorities, as has sometimes been suggested. Certainly a great majority of the people in the Pacific Northwest have evinced their opposition to a Columbia Valley Authority. In my opinion, they will vigorously oppose any alternative to an "authority" that would contemplate complete Federal control. Only a minority, and despite frequent opportunities, have voted in favor of public ownership at the local level.

The investor-owned, state-regulated utilities have good public relations. Our capital structures and financial positions are sound and conservative. We have the highest per capita use of electricity, at the lowest rates, with tremendous potential power supply, made possible by falling waters, cheap and inexhaustible.

We ask no special favors, but we do want you gentle-

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CONDUITS

Reports its 16th year of Progress

	Fiscal Years Ended March 31, 1952	Fiscal Years Ended March 31, 1951
Net Sales	$42,657,848	$35,142,901
Income before Taxes	7,021,532	4,497,358
Total Taxes	5,267,881	2,575,222
Net Earnings	1,753,651	1,922,136
Net Earnings per Common Share	$3.58*	$4.56*
Total Taxes per Common Share	10.93	6.33
Share Owners' Equity per Common Share	22.68	21.67

*At March 31, 1952 there were 481,752 shares outstanding compared to 406,638 shares in the prior year.

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men to study carefully the Pacific Northwest power situation in the belief that, in so doing, you will join with us in the conclusion that the investor-owned segment of the industry has force and strength and is becoming stronger as events unfold. We believe you will conclude that the Pacific Northwest and the investor-owned utilities that serve it have a great future, deserving favorable recommendations for the investment of capital funds on a lower yield basis than now exists.

Because we want the security analysts of America to understand our situation we invited several, including your chairman, to attend our Northwest Electric Light & Power Association meeting last year, participate in its programs, and visit the properties and managements of several utility companies. Simillarly a number of us were pleased to participate in the utility forum sponsored last February in this city by the San Francisco Society of Analysts. I want to take this occasion to compliment them on an outstanding job. We are looking forward to the special field trip of some 40 analysts to the Northwest this coming weekend. We regret that you cannot all come and be our guests.

THE PACIFIC NORTHWEST

The Pacific Northwest is unique. Its unusual characteristics in the field of power supply and distribution make it a significant proving ground for the rest of the country. When I refer to power in our area, I mean hydroelectric power. Our basic source of energy is falling water. The Pacific Northwest has 35 to 40% of the Nation's potential hydroelectric power, of which only about 15% has so far been developed. Water is the life blood of the West. It is necessary for irrigation, particularly in the more arid areas east of the Cascade range, for municipal uses, power, recreation, and fishery resources. These varied uses bring about some occasional conflicts of interests. In addition, we have the problems of flood control and navigation in the same manner as the great river basins elsewhere in the Nation have, but with one major exception: that is, that, owing to the combination of stream flows and terrain, our flood control and navigation projects are capable of developing tremendous blocks of electric energy.

I have said the Pacific Northwest is unique. Let me describe what I mean by the Pacific Northwest. This expansive region can be roughly identified as the old "Oregon Country," or it can loosely be described as the Columbia River Basin. It embraces the states of Oregon, Washington, and Idaho, and the westerly half of Montana. In power terms and arrangements we consider it to embrace also the Canadian area served by the British Columbia Electric Company and the state of Utah.

COLUMBIA RIVER BASIN

The Columbia River Basin approximates an area of 259,000 square miles, of which 220,000 are in the United States, or roughly 7% of the total of the Nation. For the benefit of men from the East, let me point out that this is roughly equivalent to the area of all the New England States, with New York, Pennsylvania, New Jersey, Maryland, Virginia, Delaware, and North Carolina thrown in for good measure.

The Columbia River heads in Canada at the Continental Divide and its length of 1,000 miles drops several thousand feet to sea level. From its confluence with the Columbia in southern Washington, the Snake River extends easterly at its headwaters at the Continental Divide near Yellowstone Park.

The old Oregon country was founded in part by New Englanders and Jeffersonian Democrats from the South. In either case they were a level-headed, conservative lot where governmental and financial affairs were concerned, and they have left their mark indelibly on the complexion of the people today.

THREE-WAY RESPONSIBILITY FOR POWER SERVICE

In portions of the Pacific Northwest, and particularly the state of Washington, the responsibility for electric service to the ultimate consumer is shared by various municipal agencies, private utilities, and Bonneville Power Administration, its extensive power grid playing a very important role as a major supplier of wholesale power to these distribution agencies. Partly because of this and partly as a war measure, the Northwest Power Pool was formed in 1942. It is a voluntary combination of the interconnected investor-owned utilities, municipal systems, and Federal projects. Through their co-operative efforts maximum utilization of regional power supply is obtained wherever and however produced. It is reliably estimated that, by taking advantage of area diversities in both load and resources, this has enabled the Northwest to gain an estimated 600,000 kilowatts in effective generating capacity, with a saving in capital investment approximating $100 million.

NORTHWEST POWER POOL

The Power Pool is divided into an eastern and a western group. The eastern group consists of the Montana Power Company, Idaho Power Company, and Utah Power & Light Company. The western group consists of the Washington Water Power Company, Puget Sound Power & Light Company, Pacific Power & Light Company, Portland General Electric Company, Mountain States Power Company, the municipal systems of Seattle and Tacoma, and the Bonneville system. The western group has numerous interconnections with the Bonneville grid system, which in turn is connected with and supplies power directly or indirectly to most of the public utility districts and co-operatives in the area. The western group is connected to the south with the California Oregon Power Company, which in turn interconnects with Pacific Gas & Electric Company. On the north this western group connects with the British Columbia Electric Company and receives some power and energy from that source.

NORTHWEST UTILITIES CONFERENCE COMMITTEE

As a natural follow-up to the Power Pool, which has now completed ten years of successful operation, the Northwest Utilities Conference Committee was organized a number of years ago by the major distributor members of this western group. This Conference Committee, under the able chairmanship of C. A. Erdahl, Commissioner of Public Utilities of the City of Tacoma, has brought the region's utilities much closer together on a management and policy level. The Committee is a vehicle for finding areas of agreement, and through mutual discussions it has been found that there are many common denominators upon which agreement can be reached. These areas of agreement have tended to increase as time has passed. It has developed there is remarkable unanimity of opinion on a controversial issue such as the proposed valley authority legislation or other similar proposals to put the Federal government in a monopolistic position. I have observed with interest that the old well-established municipal operations fear too much Federal encroachment just as much as do the rest of us. They are on sound ground in desiring a maximum degree of local control and responsibility.

FEDERAL GOVERNMENT PARTICIPATION

In order that you may better understand the major influence the Federal government exercises in our Northwest power situation, I should like to recall to you the origin of its participation. The Bonneville project, for illustration, was authorized in 1933, basically to create employment and prime the pump as an anti-depression measure. But it was expected to have real value as an aid to inland navigation on the Columbia River. For that reason it had long been endorsed strongly by Oregon and Washington people, whether liberals, conservatives, Democrats or Republicans. Similarly Grand Coulee, a reclamation project, with floor control aspects, had strong support from the people of the Northwest. It is important to remember that there was nothing new to Westerners about Federal financing of reclamation projects—that had been the pattern since 1906.

By the mid-1930's, many projects were in being or under construction by the Bureau of Reclamation, and let us remember also that the original concept was simple and sound. Basically it was to bring into production lands that without irrigation would remain either desert or swamp and to turn the lands over to the farmers where they were not already held in private ownership. Thus, control through local irrigation districts or water users associations was established relatively soon, and the final result was increased national wealth on a private ownership basis. Where public lands were involved, the title was transferred to the settlers who secured a definite water right for their land and all the other privileges and responsibilities of private ownership, including, of course, payment of taxes. These concepts are particularly familiar to me since I grew up on the Klamath reclamation project in southern Oregon and, like my father and grandfather before me, was a landowner and a water user on this project.

The Federal Government has always had certain constitutional responsibilities with respect to the control of floods and improvement of navigation. As an incident to these works and to reclamation also, it was decided long ago that the Federal Government could properly develop hydroelectric power on the legal concept that it was a surplus by-product. In recent years Federal projects in the West have assumed tremendous proportions. In some instances the tail has wagged the dog, and the by-product, hydroelectric power, has overshadowed the reclamation, flood control, and navigation aspects which are the legal basis for the power development.

Because of the physical characteristics a flood control or navigation project on the Columbia or certain of its principal tributaries usually, and logically also, means a large hydroelectric installation. This is not so of many similar projects elsewhere in the United States in other river basins.

THE PEOPLE'S ATTITUDE TOWARD FEDERAL PARTICIPATION

The people of the Northwest consider this not an evil but a favorable circumstance. They believe that it would be senseless, for illustration, to build a McNary Dam for flood control and navigation purposes and not take total advantage of its potentialities. Except where the private utilities believe they can build just as well or better, the electric utility industry is in general accord with this belief and consequently frequently joins hands with the Chambers of Commerce and its Congressional Representatives in urging that appropriations be made also for electric facilities in such authorized projects. In my opinion, the simple political fact of life is that a majority of people in our region favor orderly comprehensive development of the Columbia River for flood control, navigation, and power purposes and believe that the Federal Government is presently best able to get this job done. Also, but to a lesser extent and on a more selective basis, they frequently favor reclamation projects under Federal auspices.

DANGER OF FEDERAL CONTROL

Some, and I believe the governors of all Pacific Northwest states, realize the danger of Federal control and domination which is implicit in Federal appropriations; hence the movement for an interstate compact which would assure local control and a maximum degree of local ownership. Most emphatically I want to make clear that the support for many of these worth-while projects should not be construed as acquiescence in or approval of various administrative and power sales policies which surround their operation, nor approval of the notion that, because the Federal Government can do part of the job best, it should do all of the job, to the exclusion of its citizens on either a private or local public capital basis. We recognize, however, that, since these Federal policies are determined and applied on a national basis, they can be corrected only through education and clarified legislation at that same level.

PUBLIC OWNERSHIP

No doubt because of these vast Federal undertakings and the publicity and propaganda from Federal and special interest sources and the voters of western Washington, the whole Pacific Northwest has altogether too often been labeled a "public power" region. It is a completely false label.

Let's get the record straight. The only real area of public power is westerly Washington. There we have the long-established and well-managed municipal operations of Tacoma and Seattle, with their preponderance of population. They are pioneers in that field and were established long before the advent of the New Deal. Another reason for this condition is the make-up of the early settlers in the Puget Sound area. These settlers were largely of Scandinavian descent. They brought with them their inbred economic philosophy of co-operative enterprise. They engaged primarily in fishing and lumbering. Thus they established the country's first co-operative plywood factory and numerous co-operative fishermen's unions. It was no great ideological step for them to favor locally owned public power. They are grand people, but had a vastly different political and economic outlook from that of the northern Yankees and Jeffersonian Democrats who pioneered Oregon and most of the rest of the Oregon country. The record clearly shows this.

My state of Oregon reached the high water mark of public ownership sentiment back in 1931 when the people amended the State Constitution to permit the creation of people's utility districts for the distribution of electric power where the voters in any given area chose to organize such a district. But, when they got that out of their syslem, they relaxed and took a long, hard look at any and all specific proposals to go into the business. Oregonians have been notably cautious when it comes to voting bonds, even though historically Oregon has been a leader in certain liberal political movements such as the initiative and recall and direct election of Senators.

The statistics bear me out. Since 1932 the creation of 55 possible Oregon utility districts has been voted on in elections. Of these, 43 were defeated and 12 were organized, but, of the 12, only four are active; of the four, two were created to take over the former West Coast Power Company properties on a negotiated deal basis where that company was a willing seller. During the past twelve years or so, two small municipalities have gone out of the utility business and two have gone into it—one a construction town which sprang up as an incident to Bonneville Dam construction. Recently the town of Springfield, near our leading municipal ownership city of Eugene, Oreg., voted for municipal ownership and is in competition there with Mountain States Power Company. Thus there may be a net gain of one commmunity to public ownership ranks in a dozen years.

I know of no people's or public utility district that has been created in either Oregon or Washington since 1940. So far as I know, Idaho, Montana, and Utah have no PUD's and no more instances of municipal ownership than would be typical in any state. There is little sentiment for public ownership in eastern Washington, most of which is served by either the Washington Water Power Company or Pacific Power & Light Company. There are a few inactive public utility districts in Pacific's Washington territory, with no evidence that they choose to become active. The record of Washington Water Power's recent trials and tribulations clearly demonstrates that it has the overwhelming support of 90% or more of its customers, including the City of Spokane. Of course, there are a number of REA's in all of the Northwest States, but I hardly consider them as constituting any movement for public power.

Let me sum up this subject by commenting that the investor-owned utilities serve at least 800,000 out of 1,200,000 electrical customers in the states of Oregon and Washington, notwithstanding the bait that has been held out for public ownership in the form of a preference and priority on Federal power and tax advantages. And please keep in mind that the 400,000 public ownership customers include those served by the large and long-established city systems of Seattle and Tacoma in Washington, and in Oregon the old, but smaller, municipal operations at Eugene and a few other communities.

In Oregon the private utilities serve 90% of all customers, with the remainder about equally divided among Eugene and eight small municipal operations on the one hand and the four public utility districts and REA's on the other. The PUD's themselves serve less than 2% of the total. And yet not so many years ago that was presumed to be the vehicle to convert Oregon into public ownership!

PACIFIC NORTHWEST DEPENDENT ON GOOD WATER CONDITIONS DURING PERIOD OF TIGHT POWER SUPPLY

It seems most paradoxical to talk of a power shortage in a region that boasts perhaps the highest per capita installation of generating capacity in the United States, the highest average residential use, and the greatest potential source of hydroelectric supply in the Nation—roughly 37 million kilowatts. But call it what you will, we have and will continue to have for several years a tight situation where peak loads will exceed resources under unfavorable water conditions. Last fall, after a dry summer and with stream flows dropping, we were confronted with a possible deficiency of about 600,000 kilowatts under continued critical water conditions. Fortunately the rains came in abundance and provided us with a good water year until at least the fall of 1952. To give you a better perspective of this condition, I should comment that the total load in the Northwest Power Pool, including British Columbia Electric Company, aggregates 6 million kilowatts, and the resources that supply it are virtually all hydroelectric plants. Consequently, and until more upstream storage is provided, the resources can change 10% or more rather quickly with varying stream flows.

In our area, the fall and winter months are most serious because this is the time of maximum load and minimum flow, and thus minimum output from the Columbia River plants. This coming fall and winter we could experience a shortage, but it should be less serious. If we assume that the same procedures are set up as obtained last year, this deficiency, if it occurs, should be taken care of through curtailment of Bonneville's interruptible aluminum load and some load shifting. Thereafter we expect the situation to improve progressively as new plants come on the line. We should be out of the woods by the end of 1955, with power available for major new industry over and above estimated "normal" load growth and existing Federal commitments, provided planned construction schedules are maintained.

BACKGROUND REASONS FOR TIGHT POWER SUPPLY

The principal reasons for the tight power situation can be summarized as:

1. Extraordinary population increase and increase in the use of electricity by all customers. This is illustrated

by my own company, whose average residential customer has increased his use from 1,518 kilowatt-hours in 1940, to 5,703 kilowatt-hours at this time. At the same time the total amount of energy sold by the company more than trebled. Other Northwest companies have approximately the same record. You, of course, know that the West is growing rapidly and that Oregon and Washington have been among the fastest growing states in the Union.

2. Repeated assurances by Bonneville Power Administration that it could provide the necessary power supply from Federal projects and a widespread belief that it could do so.

3. The establishment within the western group area of a number of aluminum and other electrometallurgical plants which in the aggregate use approximately 43% of Bonneville's output.

THE CURE IS MORE GENERATING PLANTS

Obviously the cure for this supply deficiency is the building of new projects which in fact is proceeding apace all over the region. Let me give you some data on this matter. The privately owned utilities have under construction almost 700,000 kilowatts of new capacity, and the municipal systems are constructing an additional 420,000 kilowatts. Over 1 million kilowatts of additional non-Federal plants are scheduled to be constructed in 1952 to 1954. Nine Federal plants are under construction with an aggregate capacity of 3,687,000 kilowatts, and an additional 3,106,000 kilowatts of hydroelectric plants are authorized by Congress for which no appropriations have been made.

In our country, the fish versus dams controversy is a very real one, and presently at the state level is holding up construction of some large federally licensed projects by Portland General Electric Company and the City of Tacoma. Also, the Indians' treaty fishing rights is a factor in holding up, at least temporarily, appropriations for The Dalles Federal project on the Columbia river. We believe these problems will be ironed out, however, so that they and the entire program will go forward substantially on schedule.

PACIFIC NORTHWEST RESOURCES

The Pacific Northwest is not only large, but it is also rich in natural resources. It is growing rapidly, and we confidently expect this growth to rival that of even this phenomenal state of California. Its economy is based on agriculture and the lumber products industry, with mining an important factor, particularly in the states of Montana, Idaho, and Utah. Its recreational opportunities constitute a major resource. It has become one of the light-metal centers of the world. Commercial fishing is important. Portland, at the confluence of the Columbia and Willamette rivers, has one of the finest fresh water ports in the world, and ranks as a major port in worldwide shipping. Puget Sound is one of the world's finest land-locked harbors, and Seattle, Tacoma, and Everett are important industrial and shipping centers. We have many important other lesser harbors on our coast line.

It should be apparent, in view of these varied resources and the projects under way and planned, that the utility systems in the Northwest are due for tremendous growth, with a corresponding need for new capital. In recent years we have made some outstanding accomplishments, which are definite plus factors. Very briefly here are some of them.

Long-Term Federal Contracts. The signing by five utility companies in the western group of five-year power contracts with Bonneville Power Administration, with provisions for review and extension so that at all times the contracts will have a remaining life of three years. These contracts represent a big step forward in the development of fair and business-like arrangements between the Federal Government and the utility companies involved.

DEPA Order. The establishment by Defense Electric Power Administration of an orderly and fair procedure for the curtailment of power use as necessary in the event of adverse water conditions. Its order, to assure minimum disturbance to the economy of the region, provides that Bonneville's interruptible aluminum load shall be the first to be curtailed, with curtailment of use thereafter by other heavy industries in such a manner as to maintain maximum employment and minimum economic disturbance. Further, and to the extent curtailment should apply to the general public, it provides for fair and impartial treatment, regardless of public body preferences or contractual relationships with Bonneville.

Surcharge Principle Approved. The approval by the Oregon Public Utilities Commissioner in specific form, and by the Washington and Idaho Commissions in general form, of the principle of surcharges so that the affected utilities could recover currently any excess power costs occasioned by abnormal use of their steam plants, because of a shortage in hydroelectric power. This surcharge arrangement is simply a variation of the fuel escalator clauses widely used in areas where steam-electric plants provide the bulk of electric energy. It gives assurance of stabilized earnings during the period of critical power supply and without the necessity of permanent rate increases.

Private Enterprise Preserved. The emancipation of Pacific Power & Light Company from its holding company control and threatened sale to public ownership groups, and the recent action of the board of directors of American Power & Light Company, indicating that it will move to distribute the stock of the Washington Water Power Company to its stockholders and thus to the public. We hail these events as a significant victory. These two fine companies can now continue to do a grand job in the public service under local management and without the threat of a negotiated sale to remote PUD's who at most represented only a fraction of their customers.

New Generation by Private Utilities. Probably the most important development has been the willingness on the part of utilities in the western group of the Power Pool to join their sister utilities to the east, north, and south in the construction of new generating plants coupled with public support of such undertakings. Only a few years ago this appeared impossible, owing to the erroneous but widespread belief that the western group area could rely safely for its power needs on Uncle Sam's Columbia River supply. But that was before Korea, and before the Interior Department's calculated risk policy overloaded the region, at least temporarily, with additional defense power loads. In building these taxpaying power plants, it is necessary to evaluate them against the yardstick of taxfree Government power costs. This we are doing and on a sound financial basis.

We have demonstrated that we can live with municipal and Federal power and grow strong and vigorous in the process. We in the Pacific Northwest are no longer on our ten-yard line with a punt and a prayer. We are in the middle of the field, willing to co-operate with our Federal and municipal substitutes, but firm in the belief that, when the whistle blows today or tomorrow, the people of the Northwest and of America will continue to place their main reliance on the first team—the team of private enterprise and initiative. *(Applause)*

* * *

Chairman Chandler: Thank you.

Our third guest comes to us from Pacific Lighting Corporation and its three subsidiaries, Southern California Gas, Southern Counties Gas, and Pacific Lighting Gas Supply, which serve nearly 1,700,000 customers, more than any other gas system in the country, and this makes him a fitting spokesman for the gas industry.

He likewise is an engineer, educated in California, and likewise has served time with his state Utilities Commission. He was a Marine in World War I and an Air Force officer in World War II. Except for the latter interruption, he has been with the Pacific Lighting system since 1925, vice-president of it since 1934, and executive vice-president since 1950. He oscillates between San Francisco and Los Angeles, usually making one trip a week unless it is necessary to go to the East Coast or Middle West. His recent appearance before the St. Louis Society last February marked his fiftieth address to security analysts since September 1948, when he first talked to us in New York. It is a pleasure to have him here today to start the second fifty. Addressing us on "What's Ahead for Natural Gas?," Mr. Robert A. Hornby. *(Applause)*

* * *

Robert A. Hornby: Mr. Chairman, ladies and gentlemen, we are running a little behind, and I will try to reduce my talk accordingly. I was in Dallas, Texas, not too long ago, a rather vigorous part of the world, and I was not feeling too well. I had had a pretty rugged airplane ride, unfortunately. The waitress breezed in and starting dusting off the table—incidentally, it was a natural gas meeting I was attending—and the waitress said, "I suppose you are one of those big oil and gas men, oil in your hair and gas in your stomach." *(Laughter)* I have learned to live with those people and love them.

You have afforded me the opportunity to discuss the natural gas industry—and, speaking for our industry—we sincerely thank you. These appearances are always great challenges, as we are well aware that we appear before an informed audience. However, it is a satisfaction to talk before an audience that understands many of the technical terms of our industry as well as the economy of this magnificent land.

Fortunately, we decided at the outset of my presentations to analysts Societies that I should describe our current problems, so that you may know that we too identify them. Then I have told what was being done about them. At times we have left some individuals, even in such an informed audience, with an impression that we are pessimistic. Permit me to assure you—in words as hard as cannon balls—I am not pessimistic about the future of the natural gas industry.

I am certain that your daily blizzard of papers has been well interlarded recently with annual reports of all industry. Until this year I had the chore of dictating the initial draft and following the rewrites of our own annual report. This year I had the much easier task of only having to review the drafts. Thus I know how carefully the facts are assembled and how even more carefully the reports are written.

Today I will frequently quote from the annual reports of natural gas companies. I read these reports not to see how well they are written, but to see the nature of the challenges and the problems of the particular gas system, and what other managements are doing about these. From my journeys up and down the country, from five years as a member of the gas industry's promotion, advertising, and research committee, two and a quarter years of which I was its chairman, and from more recent contacts as a director of the Association, I have come to know many of the industry's top men, and to count several of them as personal friends. They are really an inspiring group. So I have no hesitancy in using their words to try to sketch to you in the next eighteen minutes what seems to be ahead for natural gas in the foreseeable future.

HISTORY

From the topic that was assigned to me it is evident that the future rather than the past is my area of speculation. This is not only more difficult; it is also far more hazardous. Recently I said to our able managing director at American Gas Association headquarters that "I suspect prognosticators are analysts' pigeons." Analysts have a habit of remembering and, worst of all, of referring back to records and statistics. I shall try to keep that in mind.

If you *had* permitted me to deal with history, I would have opened somewhat as follows: (page 5 of Lone Star report):

> Once upon a time, far behind the curtains of the past, a wild spark danced away on the wind from a primitive camp fire and winked above a fissure in the earth. From the fissure burst a blue flame, and the people took it for a token from the gods and were afraid. For here was fire that seemed to feed on nothing, and yet they could not put it out. Here was a force they could not understand. It was natural gas. But centuries were to pass before man rubbed his Aladdin's lamp of native wit and discovered the magic flame of gas would obey him in a multitude of ways, to light his way in the darkness, to cook and to preserve his food, to power the tools of industry, to warm him in the cold, and to cool him in the heat.
>
> It remained for America to build a great industry around this potent natural resource for the well-being and enrichment of its people. This was not because nature has been especially lavish with its bounty to America, for other areas of the globe have

> vast regions favorable to gas production. The difference lies in the way we have been able to use this endowment from nature. The American gas industry has walked in seven-league boots because it has been nourished on the tonic of opportunity. It has breathed the air of economic freedom.
>
> The board of directors of your company is convinced that our industry's future is unlimited if the liberties of America that have nurtured ingenuity and exploration, invention and investment remain undiminished.

That is the way a Texan starts his company's 1951 annual report. It is my good friend Dech Hulcy, chairman and president of the Lone Star Gas Company and the present vocal and able president of the U. S. Chamber of Commerce. (After reading those opening paragraphs I decided we should look for a new rewrite man on our own annual report.)

SALES

During World War II you will recall seeing or hearing of restaurants that had signs posted: "Be kind to our employees—customers we have plenty of." You are aware of the conditions that prompted such an attitude. Though the sign was meant to be humorous, the attitude survived the war. Many such restaurants didn't. Those commercial establishments that not only felt but acted that way found it difficult to restore proper sales and service attitudes.

Today the natural gas business has an abundance of potential customers, and in many instances is scrambling to meet the demands of existing customers. However, I find that the gas industry is well aware that one of its major challenges is not only to try to serve the hundreds of thousands who would like natural gas, but also to meet the increasing demands of those already on its system, and do it cheerfully and courteously. For example, in the annual report of the Peoples Gas Light and Coke Company, it says (page 8):

> People's Gas still has a list of more than 75,000 customers in single family dwellings who have requested gas heat and many additional thousands of Chicago families desire this service. Gas continues to be not only the most convenient and efficient fuel for home heating, but also the cheapest in the Chicago area.

In the annual report of the Columbia Gas System one of the questions and answers shows the magnitude of the demand for natural gas (page 7):

> "Did the System's customers receive all of the gas they wanted?" The answer was "No." It was necessary for the System to restrict industrial sales. It was also necessary to ask the regulatory commissions of the States in which the System operates to restrict completely the use of gas for new space-heating installations.

Columbia was one of the systems in which the PAD was asked to exercise its curtailment authority.

These two systems have splendid managements, and I know the vigor with which they are attempting to satisfy these demands. I believe there is no one with a higher sense of public relations than Jim Oates, chairman of the board of the Peoples Company. In fact, he has been a "spark plug" for a national public relations program for our industry, to which I shall refer later. Stuart Crocker, chairman of the board of the Columbia Gas System, has long been associated with the programs of the industry that have been forward looking. I consider him one of the long-headed men of our business and always a gentleman to all whom he contacts—which certainly includes his customers.

Such areas as Texas and California fortunately have been "all natural gas" for many years. Thus the gas systems have taken on the heating loads of those who wished the fuel. Also thus far the systems have been able to meet the increasing demands of their existing customers. Whereas they do not have the problems arising out of thousands of customers attempting to switch from some other fuel to natural gas for space heating, they have progressively mounting demands from domestic, commercial, and industrial customers. Often the demands of the industrial customers arise out of the fact that gas is not priced competitively with oil, the competitive fuel. When industrial customers must be curtailed, so as to supply the priority load, the domestic and commercial customers, industry must convert to a higher-cost fuel. If the period is protracted, this affects production costs which in turn affect sales price. In these days of price regulation it is not always easy for even general industry to make upward adjustments. Thus, although natural gas systems such as those in California do not have the problem of extending their systems so as to handle expanding heat loads of domestic and commercial customers, the need to curtail industrial customers does bring laments and sometimes organized opposition to rate adjustments. There are several sections of the country so affected. I see no immediate solution to either facet of this problem. Perhaps times in which we may have peace, or what will come to be regarded as peace, may bring some relief. There is no foreseeable diminution in the demand for natural gas, but probably a continuation of the need to ration gas for house heating in many cities.

Recently a visitor queried me on why our utility subsidiaries engaged in sales promotion. Those who understand the unfavorable load factor of house heating will realize that we must hold our off-peak sales for cooking, water heating, refrigeration, drying, and incineration. Pacific Lighting companies, along with other gas systems, have actively promoted superior automatic ranges, refrigerators, and other modern appliances. In the Peoples report (page 8) I find the following:

> In the last quarter of 1951 the Company actively promoted the sale of fully automatic ranges with single point ignition, which permits the lighting of all burners on the range from one pilot.

The better performance in higher-quality appliances, of course, has called for the higher-priced equipment. This has required installment financing. In fact, not only has installment financing made it possible for many gas companies to persuade their customers to install more of the satisfactory equipment, but also it has resulted in appliance manufacturers stepping up volume to such an extent as to restore the good old American idea of more for your money with greater production.

In the recent past, Federal credit controls have materially slowed the sales of this superior equipment and today we find most manufacturers and dealers with a glut. I have no predictions concerning an improvement in this situation.

Although this is a seller's market for natural gas, it will not dim our view on the need to keep and to sell the "all-gas home." Nor will it detract one bit from our desire to continue to improve public relations. We have an industry-wide executives' committee studying what should and can be done in further improving public relations. The first recommendations of that committee are now on my desk. As a matter of fact, I had an opportunity to participate in the initial meeting in which possible objectives were discussed and established. Thus I am not concerned about the natural gas industry forgetting its obligations or getting soft in the muscles, or the head, in this seller's market.

GAS SUPPLIES

The matter of natural gas supply—do we have enough now?—where will the new supply come from?—and will we have enough in the future?—is a subject certainly worthy of more than the four or five minutes I can devote to it. As to whether we have enough now to meet our markets, the answer is yes, for those now being served. As to whether we have enough for all of the markets that would like to be so served, I have no estimates. Certainly we have enough for some very large sections of them. As to whether we have enough for the indefinite future, only a fool would attempt such a forecast.

Recently there has been released the report of the joint committee of the gas and oil industries on proved recoverable natural gas reserves. As of the end of 1951, the report states that there are 194 trillion cubic feet, and that the production in 1951 was about 8 trillion cubic feet, an all-time high. Since 1946 these estimated reserves had increased from 160.5 trillion cubic feet to the 194 trillion cubic feet that I have mentioned. The net annual production had increased from 5 trillion in 1946 to the 8 trillion that I mentioned for 1951.

As for what the potential might be, I refer you to "The Outlook for Natural Gas" by Lyon F. Terry of the Chase National Bank, a talk which he gave in Cooperstown, N. Y., September 5, 1951. He thinks that the recoverable gas supply of this country will exceed at least 500 trillion cubic feet.

In a talk given by Mr. DeGolyer, of the well-known firm of DeGolyer and MacNaughton, he says he is optimistic about the discoveries of the future, as well as concurring in the estimates of the proved recoverable natural gas reserves that I have mentioned. I cannot give you the date of this talk, as somehow the letter of transmittal got detached, but it was late in 1951. It is excellent. Mr. DeGolyer makes this observation (page 3):

> In the search for oil, which enjoys a ready market, gas is often found to the wildcatter's sorrow. In spite of this "by chance" method of gas discovery, the proved gas reserves of today require practically astronomical figures to detail, not to mention the possibilities of additional reserves which may be found if the search is intensified, or even if the known gas pools are drilled sufficiently to determine the outer limits.

He makes an observation of which I consider this audience will have the greatest appreciation (page 4).

> Our minerals are a source of wealth only when they are exploited and made available to the country in a usable form. To do this requires money, men, and materials. Nature's storehouses do not give up their treasures easily. Work and ingenuity, plus good old American "know how," are essential.

He then observed that the proved reserves at this time should be considered closer to 250 trillion cubic feet, and he says (page 4): ". . . and I think future events will bear out such an opinion." He adds further: "What has brought about such an astounding and outstanding phenomenon? I will answer this question simply and in one word—"Profit." Gentlemen, I will add further—venture capital. As I previously said, I do not consider money a vulgar subject. Nor do I consider the word "Profit" synonymous with "Evil." The fact that the petroleum industry has been able to make profits has produced the development of our natural resources not only in the United States of America but all over the world. I agree with Mr. DeGolyer that the consumers have been the chief beneficiaries, and that (page 8): "They are able to buy better products today at prices approximately those of 25 years ago."

It is a fact that the independent wildcatter is still discovering oil and gas fields, though today it costs a great deal more to drill a well than it did even five years ago. The gas industry applauds the wildcatter's courage, we certainly hope for his success, and we ask that he be allowed to search for his El Dorado with a minimum amount of bureaucracy.

I close these too brief comments on gas supply with a quote from D. A. Hulcy's annual report for the Lone Star Gas Company (page 7):

> All along it has been the policy and practice of the Company to attach new sources of gas supply as they are developed. Throughout the Company's history, a great many oil and gas producers have explored the Company's general operating area, finding both gas fields and oil fields productive of gas. Today, the Company has attached to its system, and available for current and future use, a volume of gas reserves sufficient for many years. Its current position on gas reserves is unquestionably the finest in its history. And it promises to be better.

That comment certainly can be made by many other systems in the United States. However, getting your share of the gas supply, raising the money, constructing pipe lines and facilities are tasks that require men of vigor as well as vision. The natural gas business is no place for a "pantywaist" nor for the executive who is more concerned with "How am I looking?" than "How am I doing?."

Getting adequate compensation for these efforts is my next subject.

RATES

Oft-appearing expressions of: The company has applied for, your company has applications on file, the industry needs, the management has pled for, the utility asks for, a plea for a rehearing has been made, there is a petition for review, the applicant prays for—all indicate that the matter of adequate rates is not solely within the best efforts of the industry. With but rare exceptions it is a matter in which others have the final decision. Since World War II, rates have become a major problem. It may not be the major problem for all time, but at the moment I for one am willing to pray that none be greater.

In the Consolidated Natural Gas Company's annual report for 1951 it says (page 8):

> The System Companies are facing major rate problems in 1952 because of higher prices that must be paid for gas purchased from the pipeline suppliers and because of increases in their own operating costs and income taxes.

The Texas Eastern Transmission Corporation's 1951 annual report says (page 5):

> In 1952 the company can anticipate a continued rise in operating costs. A substantial portion of this increase will result from increases becoming effective in the Fall of the year in the purchase prices of natural gas under certain of its long-term purchase contracts having clauses providing for acceleration of prices. While the management is not in a position to state definitely at this time exactly when and to what extent an increase in rates will be necessary to compensate for increased operating costs, its present intention is to file an application for such increase with the Federal Power Commission in 1952.

American Gas Association headquarters tells me that the last tabulation showed rate change applications before the FPC in the following amounts:

$92 million of applications suspended awaiting consideration.
$25 million in effect under bond.
$22 million applied for but not yet suspended.

These are large amounts, but they affect a great number of customers and even greater volumes of sales. Even if they were all granted, the total increase would be a fraction of what has been experienced in practically all other lines of consumer hard goods, and of course an even smaller fraction of what has been experienced in food and clothing. These increases in city gate prices are estimated at something less than an 8% rise.

As has been previously mentioned, there is a very able committee of the American Gas Association considering a public relations program on an industry-wide scale, in which I had the good fortune to participate, as a substitute, in the first meeting. One of the several industry challenges considered by this committee was the recognition that there must be many upward adjustments in the sale prices of natural gas. With no known exceptions, gas systems in the United States today find themselves having exhausted the means with which to meet the mounting costs arising out of the Korean war inflation which has been superimposed upon the postwar II inflation. For example, the Columbia Gas System's annual report states (page 11):

> We have had no general increase in rate levels during this period of rising costs. The System's earnings have been maintained by increased volume of sales and increased operating efficiency. But this is no longer possible. Our own costs of rendering service have increased materially.

The report then mentions that the three major pipe line companies serving this system have had rate increases or have applied for them, and that these increases must be compensated for. It adds that there are certain further rises in the cost of gas and in operations. You may have seen some of the excellent advertisements that Columbia is running in national publications. Here is a quotation.

> If we are to continue high quality service to our customers; if we are to satisfy the demands for more and more gas, we must earn more money. Not enough to put our bills to our customers up to the inflated level of other "cost of living" expenses. But enough so we can meet our obligations as a public service company and protect the investments of our stockholders.

With your indulgence I have a quotation from Pacific Lighting Corporation's 1951 annual report (pages 4 and 5):

> Customers of your companies have continued to enjoy gas rates practically identical to those which existed ten years ago, in contrast to substantial increases in almost all other costs of living. At the same time, earnings have not permitted any improvement in return to the shareholder, despite the considerable decrease in the purchasing power of the dollar.
>
> The importance of the relationship of adequate earnings to the System's ability to attract the capital required for its necessary expansion, is an economic factor which must be recognized by regulatory bodies. In a time of great growth utilities must enjoy earnings which will attract the necessary investment funds in a capital issues market which is becoming increasingly competitive. Confidence of the investing public is vital if customers are to receive dependable service at reasonable rates and the interests of present shareholders are to be protected.

Our and other companies have made those statements so often and in so many different ways that it sounds almost like an aphorism to repeat them here. But, like most fundamentals, they are true, however often they may be repeated or however often it may become necessary to repeat them.

The gas business must be managed by men who believe in our economy and the fundamentals of our republic. It is managed by men who believe that "In God we trust." However, it should not depend completely on the voluntary understanding or consideration of others. Thus I do not expect our industry to rely entirely on word of mouth for the transmission of facts and particularly the message so succinctly stated in the Columbia annual report. It must be told at every opportunity.

The gas industry will avail itself of the opportunities that are put before it such as this forum, and of course it will vigorously present its case before those regulatory bodies which by law have jurisdiction. The regulatory bodies, as well as the utilities, will benefit by a broad dissemination of the facts, and I predict that the industry will soon present its case in increasing volume to its customers.

EXPANSION

With more customers and greater demands from existing customers, utilities serving natural gas must continue their already tremendous expansion programs. For example, it is reported to me that there are pending before the Federal Power Commission applications for 12,750 miles of pipe line, and 1,050,000 horsepower in compresser stations. In report after annual report we see estimates of (particularly in the bigger systems) from $20 to $60 million to be spent in 1952 for additions and betterments.

Underground storage reservoirs are by far the most economical means with which to meet the mounting peak days. Estimates indicate that, of those reservoirs that have required, or will require, FPC approval, something like $250 million will have to be spent on rights, wells, injection plants, dehydration equipment, and all the apparatus necessary for this important operation in any big natural gas system. You have heard of the Okford project in Pennsylvania and the Herscher project in Illinois. We have a few here in California of similar dimensions, both in use and in prospect. The American Gas Association tells me that there are presently about 30 companies operating such underground facilities for the benefit of over 6 million gas consumers. This part of natural gas companies operations has become so important that the American Gas Association has formed a committee on underground storage.

There is not time to review all the projected pipe lines. There are statistical tabulations which I am sure you can obtain. They all reflect expansion and show the efforts and ingenuity of the respective companies that are installing or proposing to install pipe lines to meet the great demand for natural gas.

It would be rash to forecast an indefinite continuation of the expansion programs of the immediate past and the immediate future. On the other hand, it requires only an oracle, junior grade, to predict that it will be many years before the demands will settle down to a level where the additions and betterments will require only occasional financing in moderate amounts.

GAS INDUSTRY COMMITTEES

American industry is noted for its joiners and its associations. These associations render varying degrees of service to their members. The American Gas Association is probably one of the best staffed of all associations and conducts more actual operations than most such associations. The gas industry has learned that it must work together. For example, the committee of executives on gas pipe line safety requirements, headed by Charles E. Bennett, president of the Manufacturers Light & Heat Company of Pittsburgh, is made up of top executives of 15 companies. This committee has employed expert talent, is actually supervising the work being done, and is working with the interested branches of the Government. I predict that our industry will reach a realistic and workable solution and that the safety provisions will become as generally acceptable and in use as are the requirements of the American Gas Association Laboratories at Cleveland and Los Angeles in the manufacture and installation of appliances.

One of the gas industry's more important action committees is the committee on promotion, advertising, and research, commonly referred to as the PAR committee. This group solicits the funds and gives management-level direction to the entire co-ordinated program. About $2 million will be so expended this year. Supporting and advising this administrative committee are the general planning committees for promotion and for research and the several execution committees on advertising, publicity, promotion, and research.

Not only is this joint effort making it possible to tell more people, more often, about more of the benefits of our flexible fuel, but it is also doing so at the lowest cost to the industry. It is one of those joint efforts that have not been compromised into ineffectiveness. A substantial part of the research has been devoted to how to manufacture high-Btu gas. A notable discovery in this area is already in use—the Hall high-Btu oil gas sets using heavy oils. A "coal gasification" pilot plant has been finished and has undergone shakedown tests. Trial runs have been encouraging. Dozens of projects in appliance performance, transmission line phenomena and other related problems are under way. The research into the basic theories of gas technology are commencing to show themselves in many different appliances. Research into catalysts for gaseous reactions, pressure coal gasification, interchangeability of oil gas and natural gas, pipe line flow investigation for large-flow, large-diameter systems, heat transfer in gas space-heating furnaces, induction heating in relation to industrial gas heating, and nitrogen removal from natural gas are other examples.

As many of you will recall, the American Gas Association established its laboratories in Cleveland over twenty years ago. In more recent years it established a West Coast branch in Los Angeles. These laboratories have established minimum requirements for gas appliances. Today more than 95% of the gas appliances sold bear the laboratories' blue seal of approval. These laboratories also carry on a large volume of research in gas utilization.

The laboratories managing committee and other committees such as those on safety, rate making, and taxation and several I have not mentioned have been staffed with top executives. They are all working committees well aware of the need to be searching and introspective but to get along with the job. The gas industry seems always to be pressed for time.

There is every reason to believe that such committees will continue into the future. I predict that the gas industry's joint programs will expand and improve and will provide the answers to many of its challenges.

OPERATIONS

There seems little within our natural gas operations that has not been solved or that it appears cannot be solved. The engineering and construction problems in recent years, in which there was some pioneering, particularly in the laying of large-diameter long-distance transmission pipe lines, have been largely solved, or their solution does not stump us. I foresee no unwillingness to undertake these projects, wherever the economics will support them and the materials can be obtained. In the latter category, of course, the industry is affected by the present shortage of some materials, largely steel pipe. However, it seems evident that the capacity of the steel industry is so much greater than it was during World War II that the day of adequate supplies may not be too distant. This of course, presumes that the steel industry will be permitted to resume its operations without the fetters of usurpation and castigation and that we will have at least an armed peace.

A rapidly growing industry such as ours offers excellent opportunities for better-than-average efficiency. Many of the gas companies seem to be aware of this, and you will find them studying their practices and procedures with the viewpoint of getting an increasing number of customers served, per mile of main, and per employee.

In our companies we have had our practices under continuous survey by outside engineering efficiency groups since 1937, and have been able not only to increase the number of customers served, per employee, but also to give more customer service and to do it more rapidly. Other companies are doing likewise. There is a genuine desire to keep costs to a minimum and to recognize that there is competition not only for the load, particularly that of the domestic and commercial customers, but also for the customer's dollar.

Our gas industry, like all American citizens, has its difficulties with the master planners in Washington. Attempting to foresee accurately, even within wide limits, the supplies and the demands of this vigorous Nation of ours is a difficult task when you have a background of experience in production of useful goods and services. Trying to run a complex economy from a place as physically, mentally, and emotionally remote as the Potomac is a demonstrated impossibility.

The Lone Star Gas Company annual report discusses a nemesis common to all taxpayers (page 8):

> Here is a paradox. More business and lower net earnings. Let us dispose of the more obvious reasons first before citing the crux of it. Everybody's expenses are up. So are your Company's. The cost of gas in the field is increasing. The cost of exploration and development has been on the march. These are factors that eventually can be worked out. The great factor in the net income picture is not within the range of business management. We are not alone in this situation, for much of American industry is reporting more business, and lower net earnings. Here is what has happened: Increased Federal income taxes and merchandise revenue depressed by Federal credit controls account for more than the full difference between net earnings for 1951, as compared with 1950.

The next four paragraphs of that report discuss what has happened to the income tax rate in three short years, and what has been the effect on merchandising and on merchants who find themselves not short of appliances, but with a glut of appliances and with buyers apathetic. The report concludes:

> As you all know, we are sure, the Congress of the United States is presently considering a Presidential budget that calls for the spending of $85.4 billion. The American economy cannot forever support these staggering budgets that hamstring incentive and pour the tonic of opportunity down the drain. The economic freedoms that have made our system both great and abundant are in direct jeopardy through the strangling route of taxation.

I predict that thoughtful citizens will become vocal. We shall see many of them who for the past eighteen years have been excoriated for trying to arrest this consuming taxation, no longer willing just to stand and take it.

CONCLUSION

Since World War II I have often remarked to my associates that we can deal with the problems *within* our business, but those *without* our business seem to be far more difficult. The most grievous of these are the ones that arise from those persons who are attempting to force us into another way of life. It appears that they have already taken us too far down the road to socialism and that we must make a decision on which way we intend to go from here.

They hold out the dreamland that, when our children are born, they will be fed, clothed, and housed from birth to death, probably not having to work too hard, that there will be neither rich nor poor, that no one will be better off than any other, and that the whole will be a relatively carefree world. They say that *they* will make an entirely new human race and that everybody will work for love of his fellow men instead of for the benefit of himself, his own family, and for others connected with him.

The first to conjure up this dreamland of Avalon, at least the one that we know the most about, was Plato. In more recent times it was Karl Marx. There were many in between who tried to bring about this leveling of man. These various attempts all started out on the dream of one for all and all for one, that no man should be better than another, and that each should produce to the *maximum* of his or her ability, but each should share only equally in the final product. This is the Marxian siren song of "from each according to his ability; to each according to his needs."

However, those Avalons have all been upset. They have disappeared because there never has been a perfect being. No two children are equally endowed, as any mother with two or more children can tell you. Living things do not seem to survive without some struggle. Furthermore, men want to be better than their fellow men. They want to run faster, fight harder, produce and have more, and usually live differently from their next-door neighbor. That may be odd, but that is the way it has been and that it the way it is.

Here in America, at the end of each day, men want the right to thank their Maker for their blessings and to ask for help and guidance when they alone cannot cope with the problems that arise. Their simple creed is, "In God we trust." They do not want any mother's knee to become a shrine at which it is told, "Thou shalt have no God but Government."

Those of you, and of us, who have had the determination to study, go through years of work, and put together systems that bring so much comfort, service, and low-cost fuel to so many for so little are entitled not only to just compensation but also to some pride in achievement. These companies and the whole vast industrial system have been built by free men and free markets. These United States are still the freest markets in the world, with the right of those who elect to supply the money, to place that money where *they* please, whether it be Consolidated Natural Gas or Amalgamated Ash Can.

I happen to think that each of us can do something more than just fulminating against the self-nominated messiahs of mediocrity and the masters of mendacious dialectics who would have us give up all this *and* our freedoms. I commend to you your local community in which to make your personal efforts and your own hard-won dollars effective in seeing that we elect men who support a continuation of what we have so arduously and wondrously accomplished.

In conclusion, may I say that in the gas industry, if our optimism is tempered with uncertainty, our pessimism is tempered with confidence. We are confident that the good sense of the American people will elect men of honor to public office and thus help bring an early return to bearable taxes, integrity in Government, glorification of the individual, and subordination of the state. Thank you for being so attentive and patient. *(Applause)*

* * *

Chairman Chandler: Our fourth speaker and fourth engineer, as a graduate of Cornell, turned to finance and tacked on a masters degree in business administration from New York University. He also is a commission alumnus, with one year in New York and eight years as a section chief in the utilities division of the SEC. Since 1943 he has been in charge of utility research in Laurence M. Marks & Company, the last two years as a partner with utility underwriting thrown in. He has written for the *Commercial & Financial Chronicle* and has spoken before our Chicago and New York Societies. He has also testified as an expert financial witness before the SEC and the Federal Power Commission.

Giving us the analyst's viewpoint on today's talks and on the outlook for utility stocks, Mr. Carl C. Brown. *(Applause)*

* * *

Carl C. Brown: We have had an opportunity today to listen to three very admirable talks. I have been asked to inject myself into the picture from an analyst's standpoint to see what this all means; particularly, what does it mean to the common stockholder? Investors have generally been attracted to the utilities industry because of the relative stability of its business during uncertain times.

Mr. Black has vividly outlined for us the vast growth in demand for both electricity and gas that has taken place in the California market, served by the Pacific Gas & Electric Company, particularly since the termination of World War II, and he forecasts a continuation of this trend into the foreseeable future without a letdown.

Mr. Delzell has acquainted us with the unusual background of the utilities and the tremendous development that has taken place in the Pacific Northwest, not only in the industrial expansion but also in the changed political outlook. One of the interesting matters he brings out is that, in his opinion, utilities in the Northwest are required to pay an unduly high cost for capital in relation to other companies in other areas whose outlook is perhaps not so well defined as that for the Northwest companies. Unfortunately, since the present Federal Administration has been in power dating back to 1933 it has damaged the status of these companies in the minds of the investing public. Though this condition appears now to have changed completely, it may require some further time to restore fully investors' confidence.

Mr. Hornby has sketched for us the problems of demand, supply, adequate rate of return, proper public relations, and political repercussions which face the natural gas industry. He has also acquainted us with the work of certain of the gas industry committees on planning and research. If we can maintain the American tradition of freedom of enterprise, there is no question about the large growth that still lies ahead for the natural gas industry.

The keynote of these talks can be summed up with the thought that the profit motive must be stressed to inspire continuation of the rapid growth in the gas and electric business. Only in this way will capital of the American investor be attracted to make it possible for utility managements to cope adequately with the future requirements. I shall now attempt to convey to you the analyst's approach to the outlook for public utility stocks.

THE APPROACH TO THE OUTLOOK FOR PUBLIC UTILITY STOCKS

Investors are generally attracted to the utility industry because of the relatively stable nature of its business during uncertain times and the opportunity it affords for good immediate income return with future prospects of greater return commensurate with reasonably assured growth of the business. Put in different terms, the utility investor is attracted by the prospects that (1) the initial investment is secure, (2) the outlay will earn its way, and (3) the commitment will grow in value. Utility analysts, therefore, must seek out for the investor the type of utility company stocks that can best fulfill these requirements.

Analysts are in agreement that successful utility operations require, among other factors:

1. A growing market for the service, be it gas or electricity, or both.
2. Ability to produce or purchase energy requirements economically.
3. Favorable labor relationships.
4. Proper consumer and public understanding.
5. Alert, aggressive, well-informed, and qualified executives and personnel.
6. Ability to raise capital on a sound and economical basis.
7. Favorable regulatory atmosphere.
8. Investor-conscious management.

It is unnecessary to dwell on most of these factors, since utility companies do an outstanding job with their internal operations and public relations. Their biggest problem stems from the raising of large quantities of capital, year after year, without abatement. Since there is no indication of a slowdown of capital requirements for years to come, it is of utmost importance to consider what conditions are essential to the maintenance of the financial integrity of a utility company and the enhancement of its ability continuously to raise capital economically. In my opinion, favorable regulatory atmosphere, as demonstrated by the kind of treatment utility commissions give the companies under their jurisdiction, and the management's indicated regard for the investor of its securities, particularly the common stockholders, are the key requisites.

Before World War II the number of public utility stocks, primarily of electrical companies, available for investment was quite limited. Managements were then in the "driver's seat." Investors in public utility stocks could not be too choosey then about what particular utility stock they wished to buy. It was a matter of buying primarily the big metropolitan companies, such as Consolidated Edison, Commonwealth Edison, Boston Edison, Pacific Gas & Electric, Southern California Edison, Consolidated Gas of Baltimore, Cleveland Electric, and little else. Today the list has been expanded immensely, with the result that investors can be choosey and buy the securities of companies that are located in states where there is no regulatory jurisdiction or where the jurisdiction is reasonable, where there is an indication that management will concern itself very intimately with the interest of the investor, by bringing about improvements in earnings and dividends, progressively.

Public utility operation today, in my opinion, revolves very substantially around regulation. It appears that regulation in every state of the Union is different. That is to be expected since regulatory authorities are composed of individuals who have different concepts, aspirations, and attitudes. In some states precedent is meaningless, and each individual case before its jurisdiction is judged on a different set of circumstances and conclusions. To be sure, regulatory authorities must be flexible and sensitive to the changes of time. However, they must approach their problems from a practical and realistic basis and not give preponderance of weight to theories and fixed formulas. They must be fair and responsive to investor and consumer alike. Unfortunately, most public utility commissions take the position that they are primarily an advocate for the rate payer. They thus place themselves in the position where they cannot give proper protection to the investor, who makes it possible for the utility company to grow and give proper service to its consumers. Utility commissions must recognize that the growth of the public utility industry means continuing great dependency for new capital on the investor. Capital must be attracted not only by affording good pay for its hire, but also by its suppliers being given an opportunity to prosper, with the growth and development of a utility company. To allow utilities to meet these prerequisites, regulatory authorities must recognize the need of allowing an ample rate of return *at all times*. Since inflation has raised and continues to raise the cost of building additional plants; has increased operating expenses, particularly materials and supplies and labor; has imposed heavy tax burdens; has reduced the purchasing power of every dollar of income to the stockholder, in approximately half; utility companies must have relief from their regulatory authorities. Such relief must be adequate and prompt. Our present system of regulation contains an unfair and injurious time lag that should be corrected. I am not prepared to advocate the best method for bringing this about. I am aware that, by a process of anticipating needs, say, one year in advance, as has been usual in certain rate cases before your Commission in California and others, a step in the right direction has been taken that should be taken more universally.

It is unfortunate that so many of our state commissions take an adverse view toward rate pleas of utility companies throughout the country. It is unfortunate, for example, to learn that in a recent case, where a utility company asked for a substantial rate increase and seemed to be entitled to at least part of it, it was turned down completely. Though I would not care to discuss other features about the case which are more disturbing, mention can be made of the fact that this commission stated that it was not committed to guarantee the utility company in question a 6% rate of return. In effect, it stated that in the past it allowed other companies in rate controversies to earn not in excess of 6%. In this particular case, though it was unable to make a persuasive showing of the overall rate of return under its jurisdiction, it concluded that it appeared satisfied the return was fair, despite the fact that the company's testimony indicated a return of not more than 5%. Your Commission has allowed utility companies to earn in the neighborhood of 6%, but there has been a serious time lag between asking for and receiving rate relief.

It is disappointing that in your great state, where the three largest electric and gas utilities have invested over $1 billion in additional plant since termination of World War II, investors have not shared in this tremendous growth. It can be demonstrated, for example, that in this six-year period the common stocks of Pacific Gas & Electric, Southern California Edison, and Pacific Lighting Company have receded 2 to 20% in price with an 80% increase in size of plant. Also, with the exception of Southern California Edison, where the dividend was restored to its predepression level, this great growth meant nothing incomewise to the stockholders, despite the great shrinkage in the purchasing power of the dividend dollar.

To be sure, the great Federal tax burden has been an important deterrent in this respect, but more realistic regulatory action could have helped to improve the lot of the stockholder. Every item of household cost has increased immensely since 1940. Electricity and gas still sell at levels prevailing ten years ago. How much longer California utility companies can expect to attract large quantities of equity capital, on advantageous terms, without proper and prompt rate relief, is conjectural. It can be pointed out that common stock investors of utility companies in other states have fared a great deal better during this same period. It is obvious that these better-situated companies will attract additional equity capital first and on better cost of money terms. It is hoped that our great supply of investment funds will continue to be attracted by the utility industry. To be assured of this, regulatory tribunals

California Utility Companies

	Market Prices Common Stock			Div., % Change, 1946-52	Incr. in Plant Acct., 1946-51, Millions
	1946 Avg. Pr.	1952 Apr 25	% Change, 1946-52		
Pacific Gas & Elec.	42	33 3/4	-20	0	$690
So. Cal. Edison	35	34 1/8	- 2	33 1/3*	275
Pacific Lighting	61	50 3/8	-17	0	183

*Dividend restored to rate in effect in early 1930's which was reduced from $2 to $1.50 and brought back to $2 by 1950.

must place greater emphasis on the investor's interest than they have thus far. We cannot afford to allow arbitrary and disinterested individuals to weaken any public utility company.

This is a challenge to management, since management is the most effective force that can seek fair treatment at the hands of our regulators. From my personal experience with the SEC I know that stockholders can exert an effective force toward obtaining fair treatment of different kinds before that body. I do not know of state commissions that concern themselves intimately with security holders, except on limited matters. Management cannot afford to be complacent about their earnings and dividend records. Stockholders expect and hold management accountable for improving earnings performance, related to growth experience, coupled with progressive dividend improvement. When management cannot meet these standards, stockholders will desert them and seek out situations that are more favorable. This is not always a criticism of management, since in any particular case there may be unusual circumstances beyond its power and ability that cannot be righted. It is for this reason that, when analysts are asked their opinion about the future of utility stocks, they may answer "selected issues look attractive." If one is well informed and lucky in appraising accurately the factors discussed herein, it is possible to select at any given time utility stocks that will do well market-wise while others may not.

I do not propose to single out any specific stocks for this occasion. I believe you would prefer me to generalize on the industry as a whole for this year and perhaps a few years ahead. These are the salient factors:

1. The utility industry still has vast growth potential.
2. Improved efficiencies resulting from installation of large generating units and general advances in mechanization make for improved operating ratios.
3. Unless a real war breaks out, further increases in costs, including fuel and labor, should be of moderate proportions.
4. Unless a real war breaks out, Federal income taxes have seen their peak and perhaps may be reduced next year. Presidential candidates have so expressed themselves.
5. A change in administration this year will bring about better political atmosphere toward the utilities at the national and local level.
6. Utilities will benefit this year from the full impact of the elimination of the 3 1/3% electric energy tax.
7. Higher earnings outlook and liberalized dividends, with greater expected political confidence, should make for generally higher prices for utility stocks in the foreseeable period ahead.
8. The great institutional investor demand for public utility stocks is becoming an important feature in the price structure.

In short, unpredictable disturbances absent, I believe the great continued demand for electrical and gas service, in an apparent soon-to-come more favorable economic and political setting, bodes well for the industry and well for utility investors, providing regulation is realistic. *(Applause)*

* * *

Chairman Chandler: Thank you very much, Carl. I think we would like to have our traditional question period, even though we arouse the wrath of the luncheon chairman. We will have about five minutes of questions. Then we will adjourn. Does anyone have a question? We must not be timid.

Donald F. Hine (Neuberger & Berman, New York): Mr. Chairman, Mr. Brown mentioned the fact that some of the earnings of the Coast utility companies have not measured up on a per-share basis. I am wondering if Mr. Black could give us his opinion whether that was inevitable or whether in the future it might be possible to improve the per-share earnings under a period of rapid growth?

James B. Black: We are trying to do just that. There has been a good deal of delay in bringing about the changes in the rate structures of both the gas and electrical companies in California, and I think, if it had not been for the Korean war and the consequences of the war, the fluctuation of taxes and increased costs that we have suffered in the last year or two could have been avoided, or, at least, minimized. The delay, which has been referred to several times this morning, in getting rate increases, and, in some instances, in getting proper rate adjustments, has contributed to delay in improvements, which we are all sure that we are ultimately going to get. Those delays have been due largely to the tremendous work load which has been thrown on the Commission here during the last four or five years.

This commission, of course, regulates the buses and trucks, and literally hundreds of cases, hundreds of operations under this jurisdiction, even warehouses, and they are literally swamped with the work. There is a limit to the rate of acceleration that can be given these important cases, but the objective that you have in mind is very much in the minds of the management of these companies, and they are working toward just that end.

Chairman Chandler: Thank you, Mr. Black.

Olaf B. Lighthill (Gross Rogers & Company, Los Angeles): Would Mr. Delzell comment on the possible effect on his company of the introduction of natural gas into the Pacific Northwest?

Thomas W. Delzell: We look forward with pleasure toward the bringing of natural gas into the Pacific Northwest in the belief that it will provide another energy base for the use of our citizens. It is our firm belief that the utilities out there, including our own company, can compete very successfully with natural gas at the presumed prices that will be obtained. We have a tremendous saturation, with the use of all-electric ranges, cooking, water heating now, and we expect to retain that business. We expect that there will be increased competition for new customers, of course. The only natural gas now in our area is that in Montana, and Montana sells it, as you know, in considerable parts of that state. We are not concerned about it except we welcome it and think it will work out very nicely.

Chairman Chandler: Any further questions? I gather that everyone is hungry, and we will call this meeting adjourned. *(Applause)*

General Luncheon

MONDAY NOON, MAY 5, 1952

G. Keith Funston, president of the New York Stock Exchange, addressing the general luncheon forum

Lancaster Greene

RICHARD W. LAMBOURNE, Dodge & Cox, San Francisco, General Convention Chairman, presiding.

Chairman Lambourne: Now that luncheon is over, we should like to begin the meeting, if you will kindly see that those doors are closed, and will the waiters please leave the room?

Ladies and gentlemen, fellow analysts, and guests: The official greetings for this Convention will be extended to you tonight at the annual dinner by the President of the Security Analysts of San Francisco, Mr. William P. Held. I hope that all of you will try to be there tonight. We are endeavoring to keep our program schedule on time, and, therefore, I will try to be brief.

Our honored speakers, like many of you here, have come 3,000 miles to San Francisco to take part in this Fifth Annual Convention. As you see, they have succumbed to our typical California slogan: "For the best, come West in 1952." Before we are through with this entire Convention, we hope that you will agree that we have not overstressed the many attractions on the West Coast.

INTRODUCTIONS

Very quickly, I should like to introduce all those at the head table here. I will ask you gentlemen, in the interest of saving time, to rise briefly, and I should like to ask the audience to refrain from applause until everyone has been introduced.

On my left, at the far end, Mr. James W. Shoemaker of Schwabacher & Company in San Francisco. Next to him, Mr. Hubert J. Soher, consulting economist for Walston, Hoffman & Goodwin; next, Mr. Lewis B. Reynolds, the editor and publisher of *Walkers Manual,* the "bible" of West Coast Securities. Then, Mr. Herbert B. Drake of the Anglo-California National Bank, the hard-working secretary of the Security Analysts of San Francisco.

And now, Mr. Pierre R. Bretey, of Baker, Weeks & Harden of New York, the President of the Federation, the guiding genius behind the Analysts' Special Train, without which this Convention would not have been so successful as we think it is. *(Applause)*

PRINCIPAL SPEAKERS

Next to Mr. Bretey is Mr. Ronald E. Kaehler, president of the San Francisco Stock Exchange. There will be a reception tomorrow evening at six o'clock at the Exchange. You are all cordially invited to be the guests of the Stock Exchange there, and I hope that all of you will attend. *(Applause)*

I will pass our principal speakers for the moment, and I will come now to Mr. W. G. — he is better known as "Blondy"—W. G. Paul, the president of the Los Angeles Stock Exchange. *(Applause)* On Friday, May 9, those who go to Los Angeles will be the guests of the Los Angeles Stock Exchange at an afternoon reception at the Exchange. Again, I hope you will all be there.

Next to Mr. Paul, Mr. Phillip V. FitzGerald of Dean Witter & Company, San Francisco, the program chairman of the Convention, who has done such an outstanding job. Next, Mr. Kennard Woodworth, of Eaton & Howard in Boston, secretary-treasurer and past President of the Federation. I would like to say that it was through Ken principally that we were able to have Mr. John Lockton of General Electric Company come out to talk to us today. Next, Mr. John R. Beckett of Blyth & Company, San Francisco, our field trips chairman, and, at the far end, Mr. John G. Eidell, of San Francisco's Shuman, Agnew & Compuany, our West Coast registration chairman, who has done a terrific job, and I am sure all of you appreciate it. Now I come to Mr. Marshall Dunn, sitting next to Mr. Eidell, of Wood, Struthers & Company in New York, who is vice-president of the Customers' Brokers of New York and a past President of the New York Society. He has just a few words to say on this occasion. We are very glad to have him here. *(Applause)*

* * *

Marshall Dunn: Mr. Lambourne, ladies and gentlemen, our executive committee asked me to convey to the National Federation of Financial Analysts Societies the greetings and good wishes of the Association of Customers' Brokers in New York, and Jack Hume, president of our National Association, also would join in these salutations. Mr. Nicholas E. Crane of Dean Witter & Company, a member of our executive committee, and Mr. Frank M. Collins, of Hornblower & Weeks, president of the Stock Brokers Associates of Chicago, are here attending this fine Convention.

As registered representatives of member firms, our associations are in effect trade organizations of the men and women who consider and put into effect with the customer many of the ideas and suggestions that you as analysts present in your studies. Our endeavors at this time may be summarized as follows:

1. We are developing those types of educational meetings that will help us do a better job of constructive salesmanship. They give us a clearer understanding of the problems of and outlook for particular industries and companies and of the needs of our clients.

2. We develop and present to our member firms our own needs and points of view as their salesmen and employees.

3. We have been working in active co-operation with the Association of Stock Exchange Firms and with officers of the Exchange in presenting to the appropriate legislative authorities our reasons why certain pending legisaltion should be modified. Thus, last year four of our senior members, including Mr. Collins, talked individually in Washington with the several members of the Ways and Means Committee of the House and the Finance Committee of the Senate on the proposed tax legislation respecting capital gains. We believe that the points made there in behalf of the many hundreds of thousands of security owners, whom we contact and serve in the normal course of making our livings, helped materially in keeping the holding period down to six months, instead of the year period urged by the Treasury, and the capital gains tax to an increase of but 1%, instead of the much larger amount that was urged at a time when the pressure for a big increase in tax revenues proved to be irresistible.

Thus you and we are, in effect, the two arms of the same body. If we co-operate wisely, we can accomplish much for our industry, our clients, and our country. *(Applause)*

* * *

Chairman Lambourne: Thank you, Mr. Dunn, very much. In view of the importance of field trips at this Convention, I would like to ask Jack Beckett if he has a few words to say on remaining details in that connection. Jack.

* * *

John R. Beckett: Ladies and gentlemen, and fellow analysts, on behalf of a disheveled field trip committee, I welcome you to San Francisco and express the hope that you folks will have as much fun and pleasure enjoying these field trips as your committee and others in the Society have had in arranging them. Like analysts, we anticipated, after considerable thought, what your wishes would be, and we have found that, like analysts, we were wrong in one or two respects. As a consequence, the demand for some trips is greater than the capacity of those trips, so that we apologize. We do hope that where we have substituted trips you will enjoy them. The host companies for these trips have been magnificent in every respect, and I hope that, if you enjoy these trips, you will drop a line to those companies expressing your appreciation. I think that, if you ever come back to California again, which I hope you will, perhaps, a few years hence when they have a new body of fellows willing to take on a responsibility of running these things *(laughter)*, the fact that you have expressed your appreciation will make the job that much easier for them. If you will take out your pencils, those of you who are going on trips, I have a few things that may be of importance to you.

BOAT TRIP

On the very wonderful trip being arranged by the P.G. & E. the boat quota is 325; there are 328 now registered. We thought that we would include 335, and so we have openings for seven more. We assume ten of you can swim. The trip to Santa Clara is absolutely closed. There is no more chance of getting on that very wonderful trip. The trip being arranged by Standard Oil of California has an opening for fifteen more, and so we can take reservations this afternoon for those who wish to take that trip. We will be leaving at 9:30 a.m. rather than 8:30, which is the starting time for the other trips. Incidentally, on the Santa Clara trip we are running a very tight schedule. The departing time is 8:30, and we hope to have all the buses loaded and on the way by 8:45; so will you please be prompt on that trip? Also, on the Santa Clara trip it will be necessary to wear your badges for security reasons. The Army is down there and will want to look at your names as you come in.

VINEYARD TRIP

The other trip, trip D, which is a very magnificent trip and is being arranged by the Pacific Telephone & Telegraph Company, is closed except for one more couple. That trip will also be leaving at 8:30. Trip E, of Kaiser Services and National Motor Bearing, is open for fourteen more. The vineyard trip naturally is a sellout. Lew Reynolds has been in charge of that and is trying to get some automobiles from some of the local fellows. If you will get in touch with him, he may be able to arrange for some additional local transportation. We have room for one more couple on the United Air Lines Flight which will be leaving at 9:30. On the P.G. & E. Feather River trip, we have room for five more, and the magnificent Pacific Northwest trip has room for five more. On the latter you will be visiting eleven companies for seven days, and it will be strenuous, but it will be lots of fun. You will be eating your breakfast on the plane almost every morning, and so you will get off to an early start at 5:45 a.m. This will all be by chartered plane. It is one of the finest trips that has ever been offered by these wonderful West Coast companies.

I would like to have Dick Link to tell you something about the Los Angeles trips. Dick. *(Applause)*

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Richard M. Link (Blyth & Co., Inc., Los Angeles): Thank you, Jack. Ladies and gentlemen, I would just like to say a few words about our Los Angeles field trips. Those of you who have indicated your selections have received confirmations and dinner tickets in your registration envelope when you registered at the Convention desk in the lobby. Those who are planning to come to Los Angeles and have not received confirmations, or dinner tickets, and those of you who wish to make any changes please be sure to leave your request at the registration desk. Our Lockheed and CBS trip is filled, but we have room on the North American Aviation–Douglas Aircraft trip, on the Kaiser Steel trip, and on the industrial tour. We also have a few openings for our Cuyama Oil Field trip, which is scheduled for Thursday. Richfield Oil has provided chartered planes which will leave from San Francisco Airport Thursday morning and fly over the oil fields of California, arriving at Cuyama in time for lunch and a trip through the oil fields there, and returning to Los Angeles about 5:00 P.M.

HOTEL RESERVATIONS

I know a few of you have hesitated to join this trip because of the problem of hotel reservations Thursday night in Los Angeles. . For the benefit of analysts who are on the Special Train, Robert Caird, the travel agent, is arranging for hotel reservations in Los Angeles. It is a great pleasure to have this Convention in California, and we certainly hope as many as possible can join us in Los Angeles at the end of the week. Thank you. *(Applause)*

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Chairman Lambourne: Thank you, Jack Beckett and Dick Link. Now we come to the main events of this general luncheon.

KEITH FUNSTON

G. Keith Funston, president of the New York Stock Exchange, is already known to almost all of you. He is the sort of man who really doesn't require a long introduction. He has been president of the Exchange for less than six months, but already he has shown that getting action is more important than words. His career has been most distinguished: first as a corporate executive, an officer and director of several major companies; then as special assistant to the Chairman of the War Production Board; as a lieutenant commander in the Navy in 1944 and 1945; and after that as president of Trinity College where he had a distinguished record as an educator. I that that we are very privileged here today to have Keith Funston come out to San Francisco to talk to us. Keith. *(Applause)*

* * *

G. Keith Funston: Mr. Chairman, ladies and gentlemen: I was hoping that Dick Lambourne was going to refer to our past association, but apparently that is an episode of his life he is trying to keep quiet out here in San Francisco. However, I am not going to let him get away with it. We were classmates together at graduate school in the East, and it was he who headed a very famous company called Lambourne, Clapham and Brink which had the newspaper concessions for the New York and Boston papers. He made an outstanding record there and left it. It was my good fortune the next year to succeed to that. I learned how difficult it is to follow a very good man in anything, and that has seemed to have been my ill luck in everything that I have attempted. I suppose that Dick was just as surprised as all my other friends were, knowing my ambitions, when I was in graduate school, to have me turn up as president of a college. There again I succeeded a very distinguished man. It was at Trinity College in Hartford, Conn., from which I had graduated just eleven years before being called back to be the president. I didn't know anything about being a college president at the time. When I left, the faculty still addressed me as a "freshman"; everything agreed, when I went in as president that I didn't know anything about it. I was under the handicap also that I had been the first president in the long history of this college, 130 years, who had not been an Episcopalian minister, and so the strikes were against me. The first day that I went to my new job, I sat down behind the desk that I had always stood in front of in past years, and I didn't know what to do next.

FIRST DAY IN OFFICE

My secretary then brought me an envelope, which she said was traditionally presented to the president on his first day in office; it was yellow with age. On the outside, the words went something like this: "To my successor in office, in the hopes that these words may be of as much comfort to him as they were to me," and it was signed by F. S. Luther, who was a very distinguished college man of the eighteenth century, who had been president of the college. The envelope stated, "How To Be A College President." I opened the envelope, and there was a little card that said, "Life is just one damned thing after another." *(Laughter)*

WHO OWNS AMERICA?

I know that some of you here today, and especially the committee members, are going to feel that way as I discuss my topic of the day which was assigned to me last October, and which is "Who Owns America?" As a matter of fact, perhaps it would be more appropriate if I were sitting in the audience—where I hope to be later on—listening to one of you talk. You have a reputation for being a rather well-informed group.

I don't intend, either, to regale you with a lot of high-flown phrases about the American way of life. I can't even tell you too much about the subject assigned to me for this talk, "Who Owns America?," for the very good reason that at the moment no one knows the answer. Last October, when your committee invited me to speak on this subject, they undoubtedly expected that I could announce the results of the Brookings Institution—New York Stock Exchange share owners census. Last October I had also hoped that the results would be available for the security analysts at this meeting. The survey is progressing on schedule—the field work has been completed and the results are now being analyzed, but we have not reached the stage where even preliminary figures are available. I received word today that all of the figures were turned over last Friday to the Brookings Institution by the IBM company that has been compiling all the millions of calculations as a public service. So some time early in the summer, we hope by the end of June, this survey will be completed and released. In the meantime, our discussion of who owns American productive industry will have to be in generalities.

HOW MANY STOCKHOLDERS?

Nobody knows how many stockholders there are in America today. Estimates have ranged from 5½ million upward to 20 million. From such information as we have,

How earnings work to produce more oil

IMPORTANT FACTS FROM THE 1951 ANNUAL REPORT OF STANDARD OIL COMPANY (NEW JERSEY)

In the free world, people use tremendous amounts of oil. Meeting their needs, rising year after year, has been one of the notable industrial accomplishments of our time.

For example, the peak war effort in 1945 pushed use of oil 23% higher than in 1940. This looked like a mark that would not be topped for years.

But vigorous post-war reconstruction, and expansion of industry, transportation and agriculture, made oil use in 1946 greater even than in 1945. And in 1951 it was 58% higher than in 1946.

To supply this oil has called for great expansion by the petroleum industry. It has meant new wells, pipe lines, storage tanks, refineries, tankships . . . in times of high costs.

The job has required a vast outlay of money, *which has been provided largely by the industry's own earnings.*

How this works out is shown in the case of Standard Oil Company (New Jersey), an American corporation having investments in companies carrying on the varied functions of the oil business in the United States and abroad.

Consolidated net income of Jersey and affiliates for 1951 was $528,461,000. Of this, $278,862,000, or 53%, was used to help provide new equipment.

In the six years since 1945, Jersey and affiliates have spent $2,350,000,000 for replacement and expansion of facilities. Depreciation and depletion reserves provided only 44% of that amount. The largest share of the expenditure was met by the reinvestment of earnings.

During 1951 alone, to do their part in supplying more oil for the free world, companies in which Standard Oil Company (New Jersey) has investments:

Discovered Oil

In the United States, made new oil discoveries in the Williston basin, the Uinta basin, and Texas . . . In Latin America, extended known fields in Venezuela, and opened up a new area in Colombia . . . In the Middle East, Arabian American Oil Company made two important discoveries, one in the offshore waters of the Persian Gulf . . .

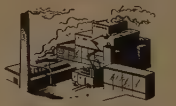
Developed Production

In the United States, drilled more wells than in any year since 1937, and greatly expanded secondary recovery operations to get more oil from existing fields . . . In Venezuela, completed 190 producing wells . . . In Canada, increased total producing wells from 844 to 1,140 . . . In the Middle East, Arabian American Oil Company and Iraq Petroleum Company increased production 57% . . .

Expanded Refining Capacity

At Baton Rouge, La., and Everett, Mass., enlarged refineries . . . At Winnipeg, in Canada, opened a new refinery and, at Edmonton, Sarnia, and Vancouver added facilities . . . At Fawley, England, put the largest refinery in the United Kingdom on stream . . . At Antwerp, Belgium, proceeded with field work on a large refinery . . . at Durban, South Africa, started work on a refinery, and at Bombay, India, completed arrangements to build a new one . . .

OIL FOR ARMED FORCES


OIL FOR FACTORIES

OIL FOR CARS

OIL FOR FARMS

OIL FOR HOMES

OIL FOR TRUCKS

OIL FOR RAILROADS

OIL FOR SHIPS

OIL FOR PLANES

OIL TO MAKE RUBBER

OIL TO MAKE CHEMICALS

Expanded Transportation

In the United States, boosted pipe line capacity substantially, particularly in the South . . . Ordered twelve new ocean-going tankships, bringing the post-war total of those purchased or contracted for to 72 . . . Began to bring Western Canadian oil to consumers in the Eastern provinces by means of two large, new Great Lakes tankers, with a third going in service this spring . . . In Iraq, Iraq Petroleum Company brought near completion a new 556-mile pipe line from the oil fields to the Mediterranean. It will permit oil production in Iraq to be more than doubled in 1952 . . .

Advanced Research

Put into the search for new and improved processes and products a total of $23,100,000, one of the largest expenditures for such a purpose by any company . . .

Continued Good Employee Relations

The interest of the company and its employees in maintaining good mutual relationships resulted in another year without strikes or work stoppages in the domestic affiliates. This was an important factor in meeting the increased demand for oil . . .

As the free world grows in strength, it calls for more and more oil. So, not just to the 254,000 shareholders who own Jersey, but to people on freedom's side all through the world, the two outstanding facts about our Annual Report for 1951 are: (1) Jersey affiliates again did their part in meeting the growing needs for oil; and (2) the competitive business system that did this job produced the earnings to help meet even greater needs in the future.

FINANCIAL SUMMARY

Standard Oil Company (New Jersey)
and Consolidated Affiliates

Total income from sales, services, dividends and interest	$3,863,317,000
Net income	$528,461,000
	or $8.72 per share
Dividends	$249,599,000
	or $4.12½ per share
Wages and other employment costs	$600,500,000
Taxes charged to income	$400,700,000
Other taxes, collected for governments	$329,900,000
Spent for new plants and facilities	$381,824,000
Number of shareholder-owners	254,000
Number of employees	120,000

We'll gladly send a copy of the full report if you wish one. Write Room 1626, 30 Rockefeller Plaza, New York 20, N.Y.

STANDARD OIL COMPANY (NEW JERSEY)
AND AFFILIATED COMPANIES

however, we may conclude that the number of share holders is sizable, has grown by leaps and bounds in recent years, and now represents an all-time high. A recent compilation made by our Exchange showed that 40 selected companies had a total of 2½ million stockholders in 1930, 3½ million in 1940, and 4,300,000 in 1950. Excluding duplication of ownership, which could not be measured, these figures indicate that in these 40 companies alone a million stockholders were added during the '30's, and somewhat under a million in the '40's, for a total gain of 86% during the twenty-year period. The larger increase in the '30's was probably accounted for by the wholesale transfer of stock held in the name of nominees to the true beneficial owners during 1930–34.

RATE OF INCREASE ACCELERATING

Indeed the rate of increase in the number of share owners seems to have been accelerating rather than declining. General Motors common stock was split two for one in October of 1950, and some 46,000 new owners, an increase of over 10%, have been added to General Motors' list of stockholders. American Telephone & Telegraph Company is another case in point. Late last spring this company became the first to report over a million share owners. Shortly after the first of this year another 100,000 more stockholders had been added—a gain of 10% in less than a year.

SHARE OWNERS OUTNUMBER EMPLOYEES

The anatomy of ownership for General Motors and A. T. & T. appears to be indicative of that of many publicly held corporations—share owners outnumber employees and are mostly small holders—about half in A. T. & T. owning less than ten shares. In A. T. & T., owners of less than 100 shares hold a majority of the stock. Women are the largest group of holders, having approximately half the stock in their names. Share holders are scattered all over the country—indeed represent a broad cross section of the entire Nation.

GENERAL MOTORS STOCK

About 40,000 institutions and groups hold General Motors stock. Included in that figure are 31,700 estates and trusts, 710 churches and religious organizations, 710 endowed colleges and other cultural institutions, 700 charities, 330 medical organizations, 590 insurance companies, 1,510 banks, 260 fraternal organizations. Just think of that, 40,000 group owners!

SHARE OWNER A WONDERFUL GUY

To us at the Stock Exchange the share owner is just about the most wonderful guy we know; we wish there were more people like him, and we're trying to learn more about him. The joint New York Stock Exchange—Brookings Institution share owner census is a landmark in this direction. You people who are so thoroughly familiar with the technical side of the securities business know how difficult it is to complete such a survey with its many problems of eliminating duplications and tabulating beneficial owners.

Perhaps some of you have had a hand in helping to assemble the mass of statistical data we are gathering. If that is so, let me thank you. The degree of co-operation we have been given by listed and unlisted companies and by the financial community in the collection of the basic statistics has been a revelation.

RONNIE KAEHLER

In this connection, I should like to mention that Ronnie Kaehler, who is the outstanding progressive leader of the San Francisco Stock Exchange, has done a wonderful job for us in getting the companies that are listed on his Exchange to give us the very detailed figures that were requested; and, Ronnie, I just want you to know how grateful we are for this and for the help you have given us in planning this whole program.

CENSUS ATTRACTED ATTENTION

The share owner census has already attracted a lot of attention and a lot of favorable comment. It has already served to re-emphasize the importance of the share owner. More and more companies are going out of their way to call attention to the vast numbers of people who are their owners.

POLITICAL POTENTIAL IS GREAT

The political potential of the stockholder population is very great. Conceivably the investor may become a force of vast importance in the councils of Government and business. When millions of people have the same idea on the same subject, something will give way.

The stockholder may be the deciding factor in the relations between management and labor—the stockholder may be the deciding factor in Government tax policy such as double taxation of dividends or the six-month holding period currently prescribed in the capital gains tax law—or the stockholder may become the deciding factor in industry's relations with the consumer.

MAY BE DECIDING FACTOR

I say "may be the deciding factor." Let me make that a little stronger. The stockholder should be the deciding factor—for the millions of stockholders are labor—they are Government—they are the consumer.

We expect the census will spell out for all to see the total number of people in this country who own American industry. The characteristics of these owners will be studied—whether they are men or women or institutions; their economic status, occupation, geographic location; the form of ownership, whether direct or through a bank or broker; the average size and value of holdings, broken down between branch of industry of the issuer and the markets where the stock is traded.

CENSUS AS A GUIDEBOOK

We expect to find out not only the number of people who own stock but also the number of people who do not own stock, the number of those financially able to own stocks who have not purchased a share, where they live, why they shy away from investment in stocks.

We expect that the Exchange and business generally will use the census as a guidebook for a long time to come.

We expect it will shed new light on the number of people who own America indirectly as well as those who have direct ownership.

I think, if more people were aware of the huge amount of money that they have invested in America indirectly or have had invested for them, they would be considerably more inclined to invest their money directly.

PENSION FUNDS

A month or so ago a research organization figured that $1 out of every $8 of the country's total personal net savings is now going into private employee pension funds. Annual contributions to private pension plans have more than tripled since 1941, and are now estimated to cover 7 to 10 million people. This growth of pension funds, the study declared, has now made them one of the country's largest single sources of investment capital. Perhaps $2.5 billion, or 25% of these funds' assets, are invested in preferred and common stocks. Mr. Lockton will tell us more about these funds.

INDIRECT INVESTMENT

Or look at the other areas of indirect investment. The growth of joint investment has been phenomenal in recent years, to the point where these pooled funds now boast of assets exceeding $4 billion. It has been estimated that 80% of these funds are invested in equity securities.

INSURANCE

Are there many Americans who do not have life insurance, fire insurance, marine or casualty insurance? There are reported to be 86 million life insurance policy holders, and most of our 40 million homes carry some form of insurance.

Are there many Americans who do not have a beneficiary contact with an institutional trust, an educational endowment, a mutual savings bank, or a savings and loan association? The assets of the groups just mentioned total well over $100 billion. Billions of dollars of that total—certainly over $5 billion at least—are invested in common and preferred stocks. And, of course, every fiduciary is investigating investment in equities as a means of enhancing the earning value of its funds.

100 MILLION AMERICANS

Although our statistics leave much to be desired with respect to completeness, it would not be illogical to conclude from the smattering of facts just presented that the answer to the question of "Who Owns America?" is at least 100 million Americans—practically the entire adult population—scattered all over this huge and great country of ours. It is probably safe to say that never before has ownership of the total wealth of our Nation been so widely spread among our people as it is today. It is certainly safe to say that never before has ownership of the wealth of our Nation in the form of securities been so widely spread among our people as it is now.

GROWTH OF FINANCIAL ANALYSIS

Both a cause and a result of the broadening base of security ownership has been the growth of financial analysis into an influential profession. At your Fifth National Convention you have assembled some 700 men and women from all over the Nation—a prodigious achievement for any profession, not to mention one so young. And the growth and progress of your profession is based not on shifting sands but on bedrock, for the raw materials of the security analyst are complete and accurate information, combined with cool and logical evaluations.

FIRST-HAND AUTHORITATIVE FACTS

Many of you have traveled—or will have traveled before you get back home—thousands of miles with that one purpose in mind: to get facts and more facts, first-hand and authoritative facts. You conceive it to be your duty to get as complete a knowledge of the companies and industries that you study as is humanly possible.

There is a striking contrast between the work of the securities analyst today and the market scene of a generation or so ago. In those days, I am told that in many instances the "insider" was king—and rumor was queen. There were manipulated deals and "bear raids." The public tried to guess what was being cooked up and catch the right swing at the right time.

REALIZATION OF OBLIGATIONS

Since those days of adolescence, the securities industry has gained a realization of its obligations and responsibilities. What has happened is tersely told in the March issue of your JOURNAL—its theme is "The Effects of Science on Securities."

RESEARCH FACILITIES

Today the New York Stock Exchange community and the San Francisco and Los Angeles Exchanges pride themselves on the research facilities available to the public. "Get the facts"—"Investigate before you invest"—those are the working slogans of the investment business. You can be justly proud of your part in leading the securities industry out of the cloudy area of tips and rumors, misinformation and lack of information, into the floodlight of full disclosure of the facts. The investment of money, whether your own or somebody else's, carries with it a responsibility that cannot be exaggerated. I think it is no coincidence that the growth of your work since your organization was formed in 1930 has paralleled a similar growth of the securities business in the public esteem.

Industry, too, has learned that full disclosure is not inimical to its own best interests but, on the contrary, is a vital part of the constant job of selling itself and its products. Industry is in the public domain and knows it.

GENERAL ELECTRIC

Three weeks ago Mr. Lockton's company, General Electric, held its annual meeting of share holders in Schenectady. Nearly 2,200 of the company's owners, from 41 states and from Canada, attended the meeting. It was the largest such gathering in industrial history. At General Electric's annual meeting twenty years ago, about 200 share owners attended.

Republic Steel Corporation works with the University of Chicago to create a textbook of basic economics for classroom use in plants and schools. General Mills sits down with its owners at regional meetings throughout the country. Union Oil Company of California tells the dramatic story of its own business and of American business to some 25 million Americans in a series of advertisements.

Indeed, I might say that business today is completely convinced of the desirability of discussing its problems, its faults and its virtues with the public. This reflects an attitude that I cannot help but admire. For there is an obvious need to present our case to the public in the most effective terms possible. We are trying to do so at the Exchange with our advertisements, our magazine, our new motion picture, our new visitors' gallery, our book about the Exchange to be published this month.

BEST SYSTEM YET DEVISED

The informational work we are trying to do is based on the premise—and I think you'll agree with me that is a sound one—that American capitalism is the best system yet devised to satisfy man's economic needs. American capitalism has made us strong and prosperous as a Nation, and holds the promise of a still richer future.

The life of the Stock Exchange is inextricably woven into the life of capitalism—as capitalism thrives, so does the Stock Exchange. To that degree, then, the best interests of the public, which is served so well by capitalism, are our own best interests—and, I might add in all honesty, our own selfish interests.

VESTED INTEREST IN INVESTOR

The Stock Exchange and its members have what might be called a vested interest in the investor. It is our proper function to encourage the investment process with honesty and integrity, to serve the present investor efficiently, to give the potential investor an awareness of the risks and opportunities open to him.

When we talk about capitalism, about investment and the investor, we simply cannot afford to try to fool anybody. We have to talk to the public with the same attitude as you gentlemen approach your own work — with frankness and realism. We cannot sing the praises of investment with the lyric enthusiasm of a sales campaign for a breakfast food. We've got to say, again and again and again, that investment in common stocks is a useful and gainful employment of money—and a potentially risky one. The investor is an intelligent adult who, if he is given the facts, is capable of making an adult decision.

Is business as a whole, is the securities industry, is the Stock Exchange filling the gaps that exist in the public mind about our business system and about the risks and opportunities for the investor? Are we talking to ourselves, as some observers claim? Or are we making some headway? It seems to me these are pretty important questions.

FINDINGS OF SURVEY

I think you might be interested in some of the findings of a public opinion survey made four or five months ago which was made available to the Stock Exchange. The survey was designed to cover a cross section of urban America and included people who own, or had owned, stocks as well as those unfamiliar with investment. Here are a few of the high lights:

1. Well over half of the people interviewed could not define a common stock.
2. 42% said they would have confidence in the investment advice given by a broker, 47% were not sure on this point, 75% expressed confidence in a banker's advice.
3. 40% said they did not know if a broker would be interested in handling a $500 investment in common stock.
4. 95% had heard of the New York Stock Exchange.
5. One half thought that the investor would not be better off if the U. S. Government took over the Exchange, but 44% did not know.
6. Only 2% thought that the Stock Exchange had hurt the country, and 40% thought that the Exchange had helped, but 50% did not know.
7. 35% thought the New York Stock Exchange safeguarded the interest of the investor; 52% did not know.
8. 38% knew that the stockholder could not be held liable for the unpaid bills of his company; almost that many did not know.
9. 52% knew that you can sell common stocks listed on the New York Stock Exchange whenever you wanted to do so; 38% did not know.
10. 23% had a good reaction to the term "Wall Street," but 57% had no reaction.

All those "don't knows" in the analysis may indicate a distressing lack of public information, but I think a more constructive interpretation may be made. At the least, the answers are an indication that a great deal of the often shocking misinformation about the securities industry has been dissipated.

GENERAL PUBLIC NOT SO PREJUDICED

To me the results indicate that the general public is not so prejudiced against the financial community, or Wall Street, or the Stock Exchange, as some demagogues would have us believe. Instead the public would appear to have an open mind—57% had no reaction, favorable or unfavorable, to the arch capitalistic demagogic whipping boy termed "Wall Street."

OPPORTUNITY TO TELL FACTS

Therein would seem to lie a great opportunity for all of us in the days to come—the opportunity to tell the facts about our business system, about investment, and about share ownership which will convert this public openmindedness to a favorable opinion of the securities industry.

CAN PLAY IMPORTANT PART

The security analysts here assembled can play an important part in this effort. I appreciate that your main task is to make practical analyses of the trend of the market and of specific investment opportunities by industry and by company. Yet, in your market letters, in your contacts with industrial executives, and with prospective investors, you have an unusual chance to make your voices heard. I hope you will take every opportunity to go beyond your immediate task of analysis and explanation.

In response to the question "Who Owns America?," we have seen that our country actually is owned by practically all of us. But the stake of some is so small that they do not recognize it as a stake. Therein lies a weakness of our democracy. Our America will be much better off when all people realize their stake in the ownership of America, even though their stake be indirect. America will be much stronger still when all people understand fully their opportunity to expand and make more direct their stake in America.

Many years ago the Stock Exchange handed down a ruling which directed that any member firm that had an office facing the street must paint the window black. The black paint of course has long since been removed from the Exchange rules, but unfortunately many people are not aware of that. It is the joint task of business and the securities industry to encourage the public to look in our windows to see the worth while goods displayed there. *(Applause)*

* * *

Chairman Lambourne: That was a wonderful and important talk. We can't thank you too much, Keith Funston!

As the individual citizen widens his share in America, we are indeed fortunate today in having Mr. John D. Lockton of General Electric to talk to us about their growing pension fund. John Lockton has been with General Electric since 1926, and he has been treasurer since 1948. He knows this fine company "like a book." Mr. Lockton is trustee of the General Electric pension trust and several related trusts, a director of various General Electric subsidiaries, and chairman of the company's savings and stock bonus plan. He is certainly highly qualified to talk to us today, and it is an honor to present Mr. John Lockton to you. *(Applause)*

* * *

John D. Lockton: Mr. Lambourne, ladies and gentlemen, before starting, I cannot help but say that not only is it a pleasure to have been invited but also I have thoroughly enjoyed meeting with you this morning. I have been impressed by the number of people in attendance, their caliber, and the caliber of the presentations. In fact, I wonder why your ranks are not extended to take in some people from industry in a company like ours, certainly like General Motors and many others that must be in the same position. Our investment activities are fairly substantial. I tried to figure out how much business we did in a year, and I think, in all of the related investment activities in the company under our own management, we bought and sold last year a total of $1,400 million in securities. *(Laughter)*

TWO STRIKES AGAINST ME

In following Keith Funston's fascinating, provoking and eloquent talk, I feel that I have two strikes at least on me to begin with. First, because my subject is quite restrictive. Mr. Funston had the whole country to talk about: "Who Owns America?" I feel tempted to throw away my subject, "Investing for the Pension Trust," and get something broadly universal among other things.

Furthermore, sitting in the audience in front of me, unexpectedly, I may say, is a bank trust officer who is one of the "Brain Trusters" of our pension trust, and he helps run the General Motors trust and many others and knows a lot more about "Investing for the Pension Trust" than I will ever know. Sitting with him is a director of General Electric Company. I would like to change my subject, I think, except that, if I did, I would be like the old lady from Vermont who never knew what she thought until she heard what she said. *(Laughter)* So, whether you like it or not, you will hear the story of "Investing for the Pension Trust."

CORPORATE PENSION TRUST

Perhaps the least known and one of the most interesting "Owners of America" that Mr. Funston has talked to you about is the corporate pension trust. The nature and extent of corporate pension trust investments are a mystery to almost everyone, for no satisfactory machinery exists for collecting data on them. Some of the questions about them which most often arise in the minds of practitioners in the investment field are: (1) What are pension trusts, anyway, and how do they operate? (2) Will there be a sufficient supply of the various types of securities required by this new Goliath to meet its investment demands? (3) Do pension trust investments affect the stock market, or are they likely to affect it in the future? (4) What is there in this new pension trust picture for me as a dealer, broker, counselor, or manager?

IN THE DARK

I confess that I am in the dark on some of these questions, just as many of you must be. My company, General Electric, does have a self-trusteed pension trust of substantial size which affords answers to some of them—from its own operations and from its frequent contacts with several other similar trusts. I am willing, therefore, to make a few guesses at some of the other questions for which I do not have an absolute answer.

UNIQUE INVESTMENT PATTERN

It should be remembered that the nature of pension funds permits, or requires, a unique investment pattern. This nature is best explained by an illustration. To determine the rate of accumulation necessary to provide a given amount of pension for an individual at age 65, it is necessary to know his age in order to know the number of years of contributions, his life expectancy at age 65 in order to know how long the pension must be paid, the assumed earnings rate of the fund, and the percentage of similar individuals presently employed who will still be employed at age 65. Let us assume that our individual employee is 25 years of age, which gives us 40 years of accumulation, that his life expectancy at 65 is 14.4 years, that an earnings rate of 2½% can be used with conservatism, and that there will be a 30% shrinkage in number of like employees at age 65. At his retirement date, it will be necessary to have a principal amount of $11,555 to pay him a pension of $1,000 a year for the remainder of his life. This would require annual contributions to the fund of $171.43 on an even basis except for the shrinkage factor, which would permit 30% reduction in this amount, bringing the annual cost down to $120.

This illustration points up the uniqueness in pension trust investing, in that:

1. Considerable liquidity is provided by the constant flow of new money which must be invested. It is easy to vary the relative importance of types of investments by merely directing the investment of this new money in a different way. In this respect there is some similarity with open-end investment companies, but:

2. The market value of the portfolio in relation to cost is not of prime importance in pension trusts, since, with a continuing parent company, there should not be any necessity for liquidation of securities to obtain funds, and this is quite dissimilar to the position of open-end investment companies.

PAYMENT OF BENEFITS

In theory, both principal and income of a pension trust are available for the payment of benefits. Actually, however, the fund is built up over a period of many years, during which the accumulations greatly exceed the amounts being currently disbursed, until a point is finally reached where the income on investments plus the company's annual contributions should be just about equal to the outgo for pensions. The growth of the country and of industry, however, keeps putting that eventual date backward, and I do not know of any large pension trust that has fully funded the company's pension plan. For all practical purposes, therefore, sales are confined to switches to better investments.

MEAGER DATA AVAILABLE

There have been a number of studies of the meager data available on pension trust investments, the consensus of which is that employee and employer contributions may be running currently at an annual rate of $2 billion to $2,250 million. Almost half of this amount is paid out in the form of pensions or as premiums to life insurance companies, leaving an annual increment available for trust investment of $1 billion to $1,250 million. I have heard of one estimate as high as $1,500 million, but this seems to me to be too high. Surely, however, any figure in this range, although large, is not too astronomical an amount for which to find suitable investment opportunities! Furthermore, the amount is not likely to increase at a very rapid rate. The greatest growth in industrial pension funds has come during the past four years, in a defense economy, with labor in the saddle, because of its scarcity and alliance with the Government, and with high taxes minimizing the cost and large Government contracts helping to provide the funds. A growth of perhaps $500 million a year in the annual rate of contributions to pension funds has come since mid-1949 The conditions that made this substantial increase possible are not likely to obtain forever. Furthermore, pension plans are now firmly established in those parts of the industrial field where they are most applicable, and the spread of new pension plans can be expected to be much slower henceforth. There will be a continuing normal growth in existing plans, however, and the cumulative effect of their continued new money investment will be important.

HOW MUCH INTO COMMON STOCKS?

How much of the new investment money of pension trusts is going into common stocks? Once again, no one really knows. Ten years ago, few, if any, pension trusts bought common stock. There are still many that do not, a notable example being the A. T. & T. trust, and I do not know of any large pension trust operating a general investment portfolio that admits intending to have more than 35% of its assets in common stock. Perhaps 20% would be a good guess of the percentage of the $1 billion of new money that is going into common stocks, and this would be on the high side. How much of an impact will $200 million of common stock purchases have in a year? Not much, I should say. A 2 million share day on the stock exchange with the average price of stocks $40 would amount to $80 million of purchases, and the requirements of pension trusts would be represented by 2½ days' activity. This is a rough measure, of course, since volume varies and many stocks on the list are not suitable for trust portfolios, but it is apparent that there has been a great deal of exaggeration in much that has been said about pension trust investments. There is no question, however, but that their purchases will have some sustaining effect on the market, since most of the shares purchased will be retired from trading, and it is likely that pension trust buying will tend to be concentrated in high-quality stocks.

OPERATIONS OF TYPICAL TRUSTS

Perhaps, before going further with this discussion, it might be well to examine the operations of a typical pension trust, if there is such a thing. I have attended several meetings recently at which managers of various pension trusts described their operations, and at one of which about 50 corporation treasurers or trust managers were present. From these meetings it was evident that, if one thing is certain about pension trust operations, it is that there is no uniformity among them. Portfolios range from 100% in the common stock of the parent company to 100% in bonds, with a liberal sprinkling of real estate investments, sometimes of a speculative nature, intermingled. General Electric Company has a middle-of-the-road sort of trust, however, which I can tell you about, and we can then examine why it does some of the things it does, which may give you the answers to some of the questions I have raised

FORMED IN 1912

The General Electric pension trust was formed in 1912. The company originally had a noncontributory pension plan which was later changed to a contributory plan. The nature of the investments of the trust has changed over the years with changes in the nature of the pension plan and with changed conditions in the investment markets.

ASSETS OF $365 MILLION

Today the Trust has assets of $365 million. It is growing at the rate of over $60 million a year, but, with maturities and switches, our annual security purchases currently come to over $100 million. Federal Social Security legislation required a substantial change in our pension plan, which was effected in October 1946. Trust operations on the present basis originated then, and the trust in its present form commenced operations with an all-Government bond portfolio — the only security available in sufficient quantities for its purposes. The trust at that time limited its investments to securities eligible for investment by New York State insurance companies, but a series of studies of the advisability of investing in common stocks culminated early in 1950 in the adoption of a stock purchase program. We were one of the early participants in this trend which is now so prevalent. Because of the large base of bond-type investments in its portfolio, the trust is dollar-averaging its way into common stock investments rather than making a wholesale switch from bonds to common stocks and is at present putting aboue one third of its new money into common stocks. Purchases would be accelerated in the event of a substantial drop in the market.

COMMON STOCK COMPONENT NOT DETERMINED

The eventual common stock component of the portfolio has not yet been determined but will not be less than 20% and might be as high as 30%. The distribution of the common stock investments is roughly in accordance with the following pattern:

Oils	18%
Chemicals	16
Utilities	13
Autos and accessories	8
Retail trade	8
Food	7
Building	5
Banks and insurance	5
Tobaccos	4
Agriculture	3
Containers	3
Nonferrous metals	3
Steels	3
Drugs	2
Office equipment	2

There are about 70 stocks on the list approved for purchase, and purchases are made selectively of whichever issues seem to be the lowest priced each week. You will note that 34% of these assets are in chemicals and oils. The aggregate yield on common stock investments is 5.84%.

CORPORATE BONDS

Corporate bonds in the portfolio have an average life of 17½ years to call date. All have the equivalent of A ratings or better. They yield 2.91%on cost, a low yield resulting from switches from U. S. Governments in 1948. Distribution of corporate bonds by major classes is as follows:

Public utilities	59%
Industrials	21
Finance companies	11
Equipment trusts	9

Government securities amount to only 19% of the total portfolio, have an average life to call date of twelve years, and yield 2.24%. It is of interest that the recent market action of these and corporate bonds affords an illustration that even a high-grade all-bond portfolio is subject to some market risk.

RAISE MANY QUESTIONS

I am sure that the foregoing description of our portfolio must raise many questions. The first you might ask is: "Why does a pension trust buy common stocks when its obligation is to pay only a predictable amount of dollars at a predictable date, whatever the dollars may be worth in purchasing power? Surely the earnings obtainable on bond investments over a period of years should meet the usual actuarial pension rate of 2½%." The answer is that:

1. It is sometimes difficult to achieve a 2½% rate with safety in an all-bond portfolio, and there can be few, if any, capital gains to offset inevitable principal losses if bond quality is sacrificed to yield.

2. To the extent common stocks increase the yield on the portfolio, they reduce the cost to the parent company in funding its pensions or provide additional income for use in liberalizing pensions.

3. It may not be advisable to fund a pension plan fully, owing to the possibility of reductions in the number of employees in the parent company in periods of business recession, so that some degree of underfunding may be permitted while a 2½% actuarial rate is still being met if common stocks are included.

4. Finally, these advantages can be achieved with reasonable safety since market fluctuations are not of prime importance in pension trusts.

The second question might well be: "How do you determine what percentage of common stocks to include in a pension trust portfolio?" At present 35% seems to be a popular ratio; the state of New York now permits this large an investment in common stocks in legal trust portfolios, and several of the larger new pension trusts are aiming at this distribution. We have been unable to find any sound basis for the 35% formula. It was apparently selected as a compromise figure. We have made many studies of the reduction in yield on various common stock components that we could experience before failing to earn the necessary 2½%, and these seemed to support about a 25% ratio. Also anything much higher than this might make it advisable to pay more into the trust in periods of low stock market levels and poor business than during periods of high stock prices and good business, and this would not be desirable. At our current rate of purchasing common stocks, it will be some time before we must make the decision as to their percentage of the total portfolio, and what we do will probably depend on the then level of the stock market. We do not consider, however, that the present high level of the stock market is sufficient justification for discontinuance of stock purchases on a dollar-averaging basis from the new funds which are constantly coming into the trust.

A third question might well be: "Why have such high-grade bonds with such relatively short maturities?" Our reasoning here is that our common stock component provides the additional yield which would otherwise have to be obtained from second-grade bonds, and we might well, therefore, stick to top-grade bonds, as we have done. The maturities of the bonds purchased are not of great importance to us except that we like the portfolio to be staggered sufficiently so that we do not have to make unduly large reinvestments in any one period. A year or so ago when bonds were very high in price, we favored the shortest maturities that would give us the desired yield, and today we are quite willing to take considerably longer maturities, but our present average maturity is a happenstance.

You probably also might question the absence of preferred stocks. We have not thought that they were a good investment at the market prices obtaining since we departed from an all-bond portfolio. They are a hybrid security, they do not yield enough more than bonds, and they have no fixed maturity as insurance against possible decline in market value. We consider they should be purchased only in periods of relatively low markets, if at all.

And, finally, we might discuss the mortgage field. It is possible today for a pension trust, even as large as ours, to find sufficient investment opportunities which can be handled with a relatively small staff to make it unnecessary to go into mortgages, unless there is a substantial yield advantage. In today's market, we do not believe we could obtain much more than a net of 3½% on Government-guaranteed mortgages and would then have to incur considerable home office expense in their administration. We haven't purchased mortgages, therefore, although the time may come when it will be advisable to do so or to go into the sale and lease-back of real estate, particularly if the tax situation still makes this type of investment advantageous.

So much for the composition of our fund. I would like to add a few comments on operating methods. There is a danger in self-trusteed funds that the management will be more isolated than would the managers of bank-trusteed or insured funds and thus miss important trends in the trust investment field. Our trust tries to avoid this by employing the advisory services of a chief investment officer of each of three of the largest trust companies in the country. We also try to keep fairly close track of what is going on in the other large self-trusteed pension trusts by personal contacts with their managers. At present, private offerings of new bond issues have been on a better yield basis than outstanding bonds of similar quality. We have made it a point, therefore, to keep in close contact with many investment firms and with banks so that we could participate in such offerings. Practically all of our bond investments have been of new issues, and last year 46% of these were privately placed issues. In order to take advantage of this situation, it is necessary for any trust to be flexible in its operations. We, therefore, have a very small investment committee which has complete freedom of action between meetings of the trustees, provided such action is in conformity with the investment pattern approved by the trustees. This pattern receives constant attention at the monthly trustees' meetings and is forecast well into the future. We thus have sufficient flexibility to take immediate action on any new issue. In order to minimize the task of following our investments, we have limited the number of individual investments by taking fairly substantial pieces of each offering. This acts to make us an attractive customer for new offerings and, together with the speed with which we can act, helps to insure that the underwriter or private banker will give us an opportunity to review most worth-while new issues.

The foregoing discussion, I think, answers most of the questions I raised at the beginning of this talk. I have told you how a typical pension trust operates and expressed the belief that, although the securities business of these trusts is great, it is not sufficiently large to affect the stock market materially and that its bond requirements can be supplied as the country grows and finances its expansion. As to your own personal contacts with the self-trusteed pension trust, I can assure you that the industry, if we can call it that, is most receptive to investment advice and good new investment opportunities. Its managers are not men apart—they come from your own ranks and think and act just as you do. They are even more anxious not to be isolated than you are to find some means of advantageous contact with them. I am sure that our interests are mutual and will continue to be so. *(Applause)*

* * *

Chairman Lambourne: Thank you very much, Mr. Lockton. It was an exceptional pleasure to have you here. Ladies and gentlemen, the paper and timber conference will be held in the terrace room, and it is now under way. If you are going to attend it, will you please go down there promptly, as we are running a little late? Thank you so much for your attention. *(Applause)*

COLUMBIA GAS SYSTEM

THE COLUMBIA GAS SYSTEM, INC.

The Board of Directors has declared this day the following regular quarterly dividend:

Common Stock

No. 72, 20¢ per share

payable on August 15, 1952, to holders of record at close of business July 19, 1952.

DALE PARKER
Secretary

June 5, 1952

DAYSTROM, INCORPORATED

DIVIDEND NOTICE

The Directors of Daystrom, Incorporated (formerly ATF Incorporated) on June 30, 1952, declared a regular quarterly dividend of 25 cents per share, payable August 15, 1952, to holders of record July 28, 1952.

In September watch for Daystrom's smart, new multi-purpose dinette sets.

OPERATING UNITS:
AMERICAN TYPE FOUNDERS
DAYSTROM ELECTRIC
DAYSTROM FURNITURE
DAYSTROM INSTRUMENTS
DAYSTROM LAMINATES

Rockwell Report

by W. F. ROCKWELL, JR.
President
Rockwell Manufacturing Company

THERE IS a saying that the likelihood of a committee arriving at a decision is in inverse ratio to the number of members of the committee. That's among the reasons our policy is to hold the number of management committees we set up to a minimum. The test is: Does the committee have a purpose that clearly can best be met by group discussion? And so we have committees for budget review, for review of research and new products, and very few others.

Recently, though, we've set up another one. This is one made up exclusively of our youngest department heads. The purpose of this committee is to review new ideas in management and recommend those which seem applicable to our operation. Not only is it good preparation for increased management responsibilities but also, we feel, it assures us a continuing and open-minded analysis of new management trends.

* * *

In a recent one of these Reports, we got the decimal point in the wrong place in an item about the hourly cost of operating a Delta drill press. A number of readers caught the error, but the correction that pleased us most came from the Eighth Grade of the Mabton, Wash., schools, which has been using this series as a part of their study of business.

* * *

SHORT FACTS ABOUT ROCKWELL—Where high pressure gas must be reduced to pressures low enough for general use, Rockwell Low Pressure Balanced Valve regulators are widely used to do the job . . . Rockwell-built Delta drill presses are so designed that two or two hundred of them can be mounted on a continuous table for mass production operations . . . EValizing is a process of coating steel parts with a corrosion-resistant bearing material. Developed by our subsidiary, Edward Valves, Inc., it reduces friction between moving or sliding valve parts by approximately 50 per cent . . . Rockwell-built Ohmer taximeters can be mounted on brackets at the rear of the front seat, or, if standard automobiles are used for taxi service, the meter fits snugly into the glove compartment so that the right side of the front seat can be used for payloads . . . Our 1951 annual report, which has brought a lot of comment because of its completeness, was actually produced at a relatively low cost, since we simply re-worked a booklet prepared to detail our facilities for sub-contract defense work.

* * *

Many industrial engineers have pointed out that though most factories of any size today have modern production equipment and have applied time, motion and cost controls to manufacturing operations, that not infrequently the indirect or service operations are done just about the way they were a decade ago.

Says Stanley Farwell, President, Business Research Corp.: "*Time and space problems in the shipping room and maintenance department are just as directly related to costs and profits, just as directly related to productive capacity, as any other department.*"

Our Delta Power Tool Division has worked with many plants in improving maintenance and shipping department organization, and in selection of the proper power tools for maximum efficiency. Some of the Delta tools were designed specifically to meet the requirements of shipping and maintenance departments for extreme versatility. An example is the new Delta radial saw, which cuts miters from 0° to 90°, makes cuts 5⅛ inches deep, is fully guarded and has simplified controls so that inexperienced employees can operate it easily.

One of a series of informal reports on the operations and growth of the
ROCKWELL MANUFACTURING COMPANY
PITTSBURGH 8, PA.
for its customers, suppliers, employees, stockholders and other friends

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SAFEWAY STORES
INCORPORATED

Preferred and Common Stock Dividends

The Board of Directors of Safeway Stores, Incorporated, on May 27, 1952, declared quarterly dividends on the Company's $5.00 par value Common Stock and 4% Preferred Stock.

Dividend on the Common Stock is at the rate of 60¢ per share, and is payable July 1, 1952 to stockholders of record at close of business June 18, 1952.

Dividend on the 4% Preferred Stock is at the rate of $1.00 per share and is payable July 1, 1952 to stockholders of record at close of business June 18, 1952.

MILTON L. SELBY, *Secretary*
May 27, 1952

Edison

Southern California Edison Company

DIVIDENDS

COMMON DIVIDEND NO. 170

PREFERENCE STOCK
4.48% CONVERTIBLE SERIES
DIVIDEND NO. 21

PREFERENCE STOCK
4.56% CONVERTIBLE SERIES
DIVIDEND NO. 17

The Board of Directors has authorized the payment of the following quarterly dividends:

50 cents per share on the Common Stock;

28 cents per share on the Preference Stock, 4.48% Convertible Series;

28½ cents per share on the Preference Stock, 4.56% Convertible Series.

The above dividends are payable July 31, 1952, to stockholders of record July 5, 1952. *Checks will be mailed from the Company's office in Los Angeles, July 31, 1952.*

P.C. HALE, *Treasurer*

June 20, 1952

Paper and Timber

MONDAY AFTERNOON, MAY 5, 1952

George M. Hansen, Keystone Custodian Funds, Boston, presiding.

Chairman Hansen: Gentlemen, the West means many things to many people. This is particularly true of security analysts who are industry specialists. To one analyst the West is oil country, to another it is metals, to still another it is entertainment. To me as a paper analyst it is all of these and many more. Our trees are shelter. They are fuel. They are the films that are so entertaining. They are the books we read. They are the records that business must keep. The trees are the backbone of two industries which rank among the Nation's and the West's largest, paper and timber.

We are fortunate to have with us today two of the oldest and most illustrious names associated with these industries in the West, as well as a scholar of the great American and Canadian paper and timber industry.

Our first speaker is Mr. J. David Zellerbach, president of Crown Zellerbach Corporation. Mr. Zellerbach has spent practically his entire business life in the paper industry, although his talents, as you all know, have not been limited to his main trade. Mr. Zellerbach is a director of Rayonier which, of course, is closely allied to the paper industry. Also he branches out into very interesting fields. He is also a director of the Wells Fargo Bank and a director of Mt. Zion Hospital. It gives me great pleasure to introduce Mr. J. David Zellerbach. *(Applause)*

* * *

J. David Zellerbach: Mr. Chairman, ladies and gentlemen, as a result of experience that I have had in talking with some of the groups in your field, I have not prepared a set speech, but have made some notes from which I will try to outline to you what I think are our prospects ahead for the pulp and paper industry. I am not going to give you a lot of figures, because you fellows have all the figures, and probably could give me figures.

In order to evaluate the future of this industry, I think we need to look rather briefly into its past and see what is happening, and then we can perhaps make some worthwhile predictions. The paper industry, as you all know, is one that has operated on a very high fixed investment, investment in plants, and, more recently, heavy investment in timber. It has required, for that reason, a high operating ratio in order to operate at a profit.

TWO PERIODS OF OVEREXPANSION

In the past we have had two periods, you might say, of overexpansion—important periods. The first was in the newsprint industry starting in the late '20's and carrying on until about the outbreak of World War II. The second was in the late '30's in the kraft paper industry, when the industry was moving out of the areas where timber had become scarce and high costs prevailed into the South to utilize the timber resources there. During this latter period there were other things about the paper industry that I will touch on a little later, but one of them, I might mention here, was some rather unwise pricing policies in the industry which emphasized the need for high operating ratios as against other industries that were able, because of a sounder price policy, to take the swings with more favorable results.

World War II saw about the end of the period of oversupply in the industry. During the war, of course, there was curtailment due to inability to supply all the raw materials needed to keep the industry running fully and also inability to get equipment for expansion.

During the war, and after, there has been a very substantial increase in demand on this Continent and, also, as one of the results of the war, the industry was pretty well forced to go on a self-sustaining basis, so far as pulp supply was concerned, because of the cutting off of foreign supplies.

Another result of the progress that has been made in recent years, partly forced by the war and nonavailability of pulp supplies, was the necessity for the industry to integrate its companies that had formerly relied on Scandinavian sources. They had to find their own suppliers at

At the paper and timber forum *(left to right)* Speakers W. T. Moran, J. D. Zellerbach, and J. P. Weyerhaeuser, and Chairman George M. Hansen

George Shimmon

home or build their own supplies. This strengthened the industry because it eliminated the effect during competitive periods of low-cost supplies coming into mills which we call "converting" mills. It also led toward integration at the other end into conversion of products. Instead of relying on a limited number of customers to take its tonnage in large amounts, the industry now has thousands of customers, and this gives it strength against pressures, against the price situation.

FINANCIAL POSITION OF INDUSTRY

The financial position of the industry is also considerably strengthened as a result of the period of strong demand and full operation during and following the war, whereas I think most of you will recall the industry was anything but strong financially at the beginning or at the end of the period of the '30's. As of today, all the major companies are in very sound financial position and are thus better able to stabilize their operations. You might say they haven't got to operate with the hot breath of the sheriff on their necks all the time.

The assets of the United States pulp and paper industry have increased very substantially since the end of the war. In 1940, at the beginning of the war, the assets of the industry amounted to about $2½ billion. In 1950 this figure had risen to a little over $5½ billion, an increase of about 127%. During the postwar period, from 1945 to 1951, expenditures by the paper industry for new plants and equipment alone amounted to $2,221 million. This represented an 83% increase in gross plant value compared with 1945, a percentage increase exceeded only by the chemical industry whose expenditures in the postwar period raised plant values by some 98%.

I want to call your attention to the fact that, although the plant values have increased substantially, this is not a true measure of the increase in capacity because of the very substantial increases in capital costs that have come about by expansion since the war. Sales in the paper industry in the same period of ten years have increased from $1,750 million to almost $6 billion in 1950, or some 236%. The tonnage increase was from $14,500,000 to about $24,500,000 during the same period, or about 70%.

PROBLEMS IN FINANCING

The extremely high investment cost required by the pulp and paper industry poses some very real problems in financing especially in view of very high income taxes and the understandable desire of the stockholders to receive a reasonable net return. Because of the problems of depreciation and depletion, which are in prewar dollars, as against the income, which is in postwar dollars, it becomes necessary to consider a part of so-called earnings really as depreciation and depletion, and to add these to the funds needed for expansion and modernization.

The experience of the industry in the late '20's and '30's which resulted from, I might say, overborrowing, I think caused the managements of the leading paper and pulp companies to be conservative in their subsequent financial policies. The available statistics do not indicate the total national investment by the industry in its timberlands, but the growing scarcity in timberlands available for development and the acquiring of them by financially strong corporations which permanently withdraw them from the market have made it necessary, from a long-range planning standpoint, for pulp and paper producers, many of whom did not own sufficient timberlands to sustain their production, to go into the market and acquire timberlands to protect their operations.

The statistics on property investment are not available, but it is interesting to note that in 1952 the net timberland investment of five leading companies, including my own, was over $105 million, or, 14% of the book net value of all of the assets of these companies. I say "net value" because the actual value today in most instances, especially in those companies that have owned timberlands for a good many years, is many times the values that stand on the books. Now, I have pointed out to you some of the difficulties in financing the industry caused by the high investment required. There is an advantage on the other side which I think is extremely important: Those companies that were well-established before the war, that owned their plants and their timber at prewar values, are in a very strong competitive position today, because anyone new coming into the industry is required to make an investment many times that of those older companies in the field and to carry very much higher fixed charges in their costs, thus protecting the position from an earning standpoint of those older companies which have their assets at lower costs.

WILL REQUIRE ADDITIONAL CAPACITY

The increasing demand for pulp and paper products will require additional capacity in the industry in order to support this industry, and a price structure must evolve which will pay a return on these very much higher investments necessary to attract capital into the field to build this new capacity. There, again, is some assurance that the price structure of the industry will maintain itself on a sounder basis than it has done in the past.

I see my time is running out. I am going to skip over the timber supply question. I had some information on that to bring out: the more recent developments in forestry and utilization of forestry resources. As a result of certain technical and scientific developments in this field, we have greatly extended the forest supply, but I will pass over that lightly, because Mr. Weyerhaeuser is going to follow right after me, and I understand that he is going to cover that subject rather fully.

GROWING DEMAND SINCE 1920

As for demand, we have had a very rapidly growing demand in this field, going all the way back to 1920, when the consumption per capita in this country was only 145 pounds. This acceptance has grown rather steadily, with only a few setbacks of a year or so, but the general trend has been ahead right along up to 1951 when the per capita consumption was 390 pounds, which indicates probably a faster growth than most other well-established industries.

I have a lot of figures here, and maybe during the question period, if you want to ask some questions about the growth of the industry, I can touch on it.

So far as the capacity increase is concerned, there has been some feeling that the industry may be repeating past history and overexpanding. I think that the figures do not support this view. In the ten-year period, 1920 to 1929, the capacity increase averaged 6% per annum. During the depression period, 1930 to 1938, the growth was about 2%. During the period of the war, seven years, from 1939 to 1945, it was 3.3%, or an average over a twenty-six-year period of just under 4%. Since the war and with all planned expansion taken into account up until 1954, the indicated growth in the industry will be something under 4%.

So the growth is fractionally less per annum than during the twenty-six-year period from 1920 to 1945. Now, why is the industry growing at this rate? Of course, it is based on the expanding population, but to very large extent also it is based on new uses. There are just one or two new uses we would like to point out that I think will bring this point out rather clearly. I can mention paper for milk bottles. Ten years ago out of 15½ billion quarts of milk being sold in the United States 750 million, or 5%, came in paper containers. In 1950 the total sales of milk amounted to 21 billion quarts, of which 6½ billion, or 33%, were in paper containers, a growth from 5 to 33% in a period of ten years. I think that growth was held back by the inability of industry, the machine producers and also the pulp producers, to supply as many containers as could have been sold.

PAPER CONTAINERS FOR CITRUS FRUIT

Another new major element is the introduction of paper containers to pack citrus fruits, something new that has been introduced in the last few years. These have also been used in the packaging of fresh vegetables. Also heavy-duty bags for chemicals and cement, and other products of that type, which have grown in a period of ten years from 270,000 to 830,000 tons. Then there is a new process of making what we call "wet-strength" paper, which makes the use of paper practical in a good many instances where it formerly could not have been used because of the effect of moisture. For instance, it is now used in packaging lettuce, holding ice, and all that sort of thing. This type of paper becomes stronger when it becomes wet!

HIGH-ALPHA PULPS

Another use that you know a lot about is in the high-alpha pulps for rayon and Cellophane, and then there are many new products being produced which were not used, say, ten years ago, such as high-tenacity rayon for tire cord which is replacing cotton very rapidly, mixtures in carpets, and a good many other new products which are springing into use in the industry.

RESEARCH

Very briefly, I will touch on research. It seems to me there are two things that will assure a real future to the pulp and paper industry. One is the development of timberlands on a sustained yield basis. The other is unceasing research to continue the development of these new products and increase the quality of older products. Another very important phase of research is in the utilization of waste materials which is going ahead rather rapidly but not so fast as we would like. About 50% of the wood that goes into a pulp mill comes out as waste. This is, I think, the greatest industrial waste product that I know anything about. If this 50% waste from the pulp mills could ever be recovered in the form of by-products—chemical components and so forth—there is a basis for another new and very important industry.

My time is up, and I think I have indicated to you what the future of this industry is at long range. If you have any questions, I can answer them later on in the question period. *(Applause)*

* * *

Chairman Hansen: Thank you, Mr. Zellerbach!

Our next speaker is Mr. John Philip Weyerhaeuser, Jr. Mr. Weyerhaeuser was educated in the East and performed a stretch of duty in World War I. His alma mater is Yale University. Mr. Weyerhaeuser is here to tell us about the prospects of conserving timber resources for the future demand. He is particularly qualified to speak on this subject, as he has spent practically his entire life in things connected with trees. From 1933 to 1946 he was executive vice-president of the Weyerhaeuser Timber Company, and since 1947 has been president of that organization. It gives me a great deal of pleasure to introduce Mr. John P. Weyerhaeuser, Jr. *(Applause)*

* * *

J. P. Weyerhaeuser, Jr.: Mr. Hansen, ladies and gentlemen, some years ago I listened to a surprising argument between the chief forester of the great Swedish pulp company, Stora Kopparberg, and a Swedish Government forester. They were discussing how to increase the yield in some thin stands of timber. I thought that the answer to their disagreement should be apparent. After all, Stora, which is probably the world's oldest corporation, has been in business more than 641 years. Its products are accepted as world standards. Its forestlands have undergone many cutting cycles. Yet there are still debatable unknowns in its forestry practices.

I mention this incident because you analysts seek data on which to base judgments. The forest industry is peculiarly handicapped by a lack of proven facts on which to base such things as measurement of timber inventories or growth, both present and anticipated.

CONSERVING FOR THE FUTURE

My topic today is "Conserving Timber for the Future" and concerns nothing more than the practice of forestry. The advancement of the science of forestry in this country has been made directly in proportion to the financial incentive offered. When it became clear that growing trees would pay, many companies set up long-term forestry programs. Until that time the practice of forestry was talked and sold as being a *public duty.*

When the Pilgrims landed, it has been estimated that there were 8,125 billion board feet of original forests in America. Since then, it has been guessed that another 9,500 billion board feet were grown, making a total stock of about 17,625 billion board feet. Some 12,309 billion board feet fell to fire, insects, disease, and land clearing, or were used for fuel. The amount cut for wood products has been 3,715 billion board feet. So there is an estimated remainder today of 1,601 billion board feet. And, now, after more than three hundred years, forests still cover one third of America.

OVERABUNDANCE OF TREES

It is apparent, from this estimate, that our Nation began with an overabundance of trees. Trees were a nuisance, and settlers welcomed lumbermen as land clearers and as suppliers of inexpensive building materials. Trees were growing all over the Nation. For the westward migrants there were always local trees to serve the local markets. Many communities were born "when they let daylight into the swamp."

Fire was at times an ally, and, as such, was employed much too carelessly. Insects and tree diseases were almost totally ignored.

The pioneering lumberman gave little thought to the disappearance of his raw material because there was always a new stand westward where timber was abundant and cheap, where the profits from his last stand could be reinvested and be appreciated in value as the market moved with it.

CONDITIONS BRED WASTEFULNESS

These conditions bred wastefulness. Few men had the farsightedness to buck the land-clearing habits of the moment, to maintain cutover lands for regrowth. Exceptional foresight would have been needed, for not for many decades could these lands have competed in cost with the vast, untapped virgin stands of the South and the West. In most stands, as they were marketed, certain species could not pay their way, and every sawmill had a hungry waste burner, flaming symbol of wastefulness.

The transition from a timber-mining philosophy to one of timber cropping was gradual and, in fact, is still going on. Various factors contributed to this change. Not the least was the railroad-building era, which extended the economical distance for bringing in logs from the woods and also created a much wider marketing area. Improvements in water transportation turned the Mississippi into a log-and-lumber highway which will never be duplicated. The Panama Canal opened remote East Coast markets for West Coast woods. Truck logging made previously inaccessible timber available at a reasonable cost. These developments led to larger mills with greater mechanization and heavier investment. They led to greater opportunities for integration, to use of logs more efficiently. As the size and complexity of the mills grew, the incentive to make mill locations permanent became greater, and with it the incentive to insure a perpetual supply of logs for each mill.

VOCIFEROUS CONSERVATIONISTS

About 1900 reckless use of our forests brought forth a crop of vociferous conservationists. Gifford Pinchot became the apostle of forestry. He vigorously urged a movement against what he termed "profligate" waste. Theodore Roosevelt turned conservation into a political issue. As a result the forested Government lands were removed from entry, and national forest reserves were created.

We now know those predictions of a timber famine were the application of the old "shock treatment." The ardent conservationists found it necessary to scare the public out of its complacence. Another result of famine predictions was a wave of timber speculation—private investors bought timber hoping for a quick profit. Many of them later had to liquidate in an unwilling market, with wasteful results.

It is important to know that the conservationists not only halted the movement of forestlands into private ownership but also promoted a reversal. Lands have been flowing into Federal ownership steadily. During 1951, for instance, more than 276,000 acres were added to national forests alone.

One major reason for a changed financial incentive toward growing timber has been the development of markets for forest products other than lumber. Paper consumption per capita has increased from 110 pounds in 1915 to about 400 pounds in 1951. It is not that Americans are reading three times as much, but rather a revolution has taken place in the packaging industry. The cracker barrel of our youth has been succeeded by multicolored paper cartons. Nearly everything we buy today is packaged or shipped in attractive paper or paperboard containers.

Other end uses for wood pulp have been found in rayon, Cellophane, and smokeless powder, to name just a few. The pulp requirements of the country during 1951 made use of the equivalent of 14 to 15 billion board feet of forest raw material, while lumber and its newer construction partner, plywood, probably used about 37 billion board feet of wood.

SULFATE PULPING PROCESS

Most exciting has been the development of the sulfate pulping process, which makes possible a great and new use of minor species and the tops and thinnings of saw log trees. When this additional use for wood developed, sawmill management promptly developed new bark-removing processes to get cleaner logs and waste. This made available for pulping much of the log that was formerly hogged for fuel.

Bark stripped from the log is finding many new markets. It is used in plastics, adhesives, insecticides, and paperboard stiffeners.

Whole-wood fibers, as opposed to chemically purified pulps, are finding new uses in a variety of hardboards, home and industrial insulation, and oil-well drilling. New fields for bark and for fiber products are being explored every day.

New forest products are partly the result of new and efficient milling processes. Whole-log chippers permit the use of species of wood and grades of logs with low value for lumber manufacture. Power saws in the woods decrease waste by cutting lower stumps, while making the work easier and faster.

Some of the markets that lumber had lost to substitutes have been recaptured by gluing techniques permitting the manufacture of wide boards from narrow ones and long pieces from short ones. Use of glued-up arches in barns and churches has been spectacular. Pound-for-pound stronger than steel, wood trusses can do the work of steel, and do it less expensively. The gluing field offers the builder tailor-made items in a way that lumber never did before. Yes! There has been no lack of progress in the forest industry—long considered backward in this regard.

The development of new methods for applying good forestry practices has also contributed to the industry's growing incentives to conservation. Good fire detection and suppression methods, aided by radio communication, came gradually. Harvesting timber and preserving natural seed sources for another crop have taken time to prove and are still evolving. Practical thinning, prelogging, and relogging methods have undergone a great deal of experiment.

The development of this incentive to grow trees has been gradual. However, the change has been so accelerated during the last few years that many people are left singing the old tunes while a new dance is going on.

Some large companies have developed from this change. It has taken large expenditures to develop new markets, processes, and equipment for nonlumber products. But there is still a necessary place occupied by the little fellow. As its dollars become planted in fixed locations, a company wants to insure its raw-material supply. It becomes interested in the possibilities of getting additional materials from other timberland owners in the area bounded by economic transportation costs to its plant.

More than three quarters of the privately owned timberland in the United States is in the hands of 4½ million owners, who hold an average of about 60 acres apiece. These owners traditionally have brought their timber harvest to the market in their own sweet way. Whether pinched for money in an emergency or teased by a high lumber or pulpwood market, each has exercised his own judgment.

SMALL HOLDINGS A SAFETY VALVE

This tremendous number of small timber holdings has been an important safety valve in lumber production. Small holders have generally added significant amounts of lumber to the supply in periods of shortage, and held off their lumber output when demand and prices were low.

One of the major objectives of the industry is to enlist these millions of timber owners in the industry programs of waste reduction and tree farming. The tree-farm movement stemmed from recognition that timber is a crop. Like men, trees grow, mature, and die. A timber supply for the future requires new growth. Within ten years 3,500 owners have pledged their 25 million acres to this national program to grow trees commercially and continuously. Other industry activities include the "keep green" movement to promote fire prevention, and the "trees for tomorrow" program which seeks to bring an understanding relationship between the industry and the local woodlot owner.

Perhaps I should speak only for myself in expressing the belief that the 4½ million American timberland owners will be won to the practice of forestry by natural incentive more surely than by Federal legislation. Remember that there are no Government price supports for tree farmers, only threats of Government control.

Nevertheless, these efforts by the industry require cooperation with administrators of public timber, both state and Federal, but particularly the U. S. Forest Service. When the Pinchot "scare campaign" was so strong, and industry response so weak, it seems a wonder that restrictive legislation wasn't enacted immediately. But the spirit of those times was different from the present, and the Forest Service was created merely to administer public forest reserves. This happened about the time that our earliest forest schools were established. Many of the first Yale forestry graduates went into the Forest Service. It marked the beginning of an organization that has rendered distinguished service to the Nation. Its men were sincerely dedicated to its cause. Industry owes much to the Forest Service.

The Forest Service has had some hard problems to meet. It has administered widely scattered tracts in the hinterlands. The Forest Service with the Indian Service and the O. & C. Administration now owns 25% of our timberlands and fully 60% of our western mature timber. Its commercial timber was largely old growth. Whether to sell this public asset in unwilling markets in competition with taxpaying private timber was one of its problems. Another was how to sell the allowable cut during boom markets without adequate roads.

One of the Forest Service's major jobs has been to inventory the country's timber supply. We all want accurate facts about the present inventory, rate of growth, and future needs for timber. But, as I pointed out previously, changing transportation methods and standards of utilization make such an inventory a great guessing game. Each inventory has uncovered acres of growing trees never before counted. Annual growth speculation has become more generous each time it has been reviewed. Relating the annual growth estimate to the annual requirement calls for further guesses of future needs.

Forest Service estimates have been used by all people to prove all points. Secretaries of Agriculture for many years have taken a bleak view of our forest future. They repeat that the situation is serious, that cutting on private land should be regulated. Some states have minimum-requirement laws. But the conservationists' Federal bills—such as the Copeland bill, the Mitchell bill, the Wallgren bill, providing for Federal regulation—have not passed. Nor have their companion river bills—CVA, MVA, or the Omnibus—which would establish wide regulatory powers over forests.

Conservationists have joined the advocates of big central Government to promote Federal land acquisition. In the East few people realize the degree of Federal dominance in these Western states. In the 11 western states, Federal ownership of *all* land has jumped from 35 to 53% during the last twenty years! The public's attitude about this Federal land grab is conditioned by how it feels about the way private timber owners treat their asset. Thus it has become a principal job in the forest industry to foster good forest practices and to tell the public exactly what is being done. In doing this public relations task, the industry has financed AFPI—American Forest Products Industries. The tree-farm, keep-green, and more-trees activities I mentioned are also promoted aggressively by AFPI.

Our industry's program for the future is based on a desire to insure a continuous forest harvest and to turn more and more of that harvest into useful products. The development of new products and wider markets will insure a financial return to the tree farmer. Nonlumber uses of wood are increasing and tend toward eliminating waste. New uses are replacing old uses. Examples are containerboard instead of wood boxes, synthetic sheathing board instead of sheathing lumber. The only thing to limit these products is the market for them—there is no lack of raw materials.

We have a peculiarity in the forest industry. We are absolutely self-sufficient when it comes to fuel, power, and steam. We have not had to use hydroelectric power, oil, gas, or coal. If we can develop markets for other nonlumber items, so that we could justify the use of other fuels, we can increase by 100% the material marketed from our industry.

Another major industry objective is to develop markets large enough to consume not only the crop of the large company but also that of smaller neighbors who are not justified in making investments to accomplish integration economies.

The proponents of Federal restrictions proclaim that there is a continuing shortage—not in over-all growth—but in growth of sawmill-size timber. They worry about future lumber requirements. Actually, we don't have to worry about the tree size of future crops because most of the market requirements can be met by the gluing techniques and other products I mentioned a minute or two ago.

Our per capita consumption of lumber *itself* is going down (from about 400 board feet per capita in 1915 to 250 now, with a depression low of about 100). Lumbermen see large parts of their markets going to competitive materials. Lumbermen don't know what particular requirement of lumber will be essential in the future. They *are* concerned about the diminishing use of lumber.

As for the nonlumber products, even the most worried conservationist makes no headway in predicting a wood shortage. The markets must grow enormously before such a shortage could occur.

We intend to show continuing progress in the forest industry. We want to solve our own problems by our own initiative—not have solutions forced down our throats from Washington. We want more private ownership of forestlands, not less. We want the administrators of public timber to make their *whole* annual crop available when it is needed in the market. We want all concerned to help convince any remaining doubters that the time has arrived when good forestry pays.

* * *

Chairman Hansen: Thank you, Mr. Weyerhaeuser!

Our next speaker is Mr. William T. Moran, secretary of the Montreal Institute of Security Analysts. Mr. Moran has spent his entire working life in the investment banking firm of Greenshields & Company in Montreal, with the exception of a spell of duty in World War II. Mr. Moran is going to present for us the Canadian viewpoint on the pulp and timber industry. *(Applause)*

W. T. Moran: Thank you, Mr. Hansen. Ladies and gentlemen, in being asked to give the Canadian viewpoint at this forum, I have been allotted a subject that covers a most important segment of the economy of my country, for it is in the forests of Canada that a large part of our present-day national wealth is concentrated and a major part of our energy is expanded. At the present time, Canada's forest products hold the three top positions in the value of our country's exports. Newsprint is first, wood pulp second, and lumber third. This is not unexpected, as in Canada we have the last remaining large-scale coniferous forest reserves in the world, excluding those of the countries behind the Iron Curtain

ESSENTIALLY A FOREST COUNTRY

Canada is essentially a forest country. More than half of our land areas are forested and suitable only to the growth of wood. In turn, roughly half of such forested areas is classified as being unproductive. The other half is classified as productive and consists of areas capable of producing continuous crops of timber.

As in the United States there are still no complete figures on wood inventories and rates of growth in Canada. However, our Federal Government foresters estimate a total productive area of 712,000 square miles, of which some 484,000 square miles are classed as accessible. You could cover France more than twice over with the accessible area alone.

Actually there is no permanent distinction between an accessible and an inaccessible forest. With the construction of a road, a railway, a mill, or even a dam, the position is altered, and new areas are opened for the supply of low-cost wood and wood products. Meanwhile the accessible areas constitute a valuable reserve for future use.

Individual companies in the industry have inventories of their own limits which, together with other available data, permit a reasonable estimate of the balance between consumption and regrowth. For example, average annual growth of about 11 cubic feet per acre is estimated as being required to replace annual consumption. Though many areas produce only small regrowth each year, Government foresters have recorded annual regrowth over considerable tracts ranging from 25 to 40 cubic feet per acre. On the basis of indicative data of this kind, there is no doubt that our forests are growing faster than the annual rate of depletion.

From stands of merchantable timber estimated at some 2,000 billion board feet in Canada, probably some 19 million board feet were withdrawn last year. Based on previous rates of depletion, sawmills probably took 38% for conversion into lumber products and the pulp and paper industry some 30%. Fuel wood probably accounted for 23%, and the remainder went into miscellaneous wood products.

Not only do our forests provide an unparalleled volume of timber products for sale but also a wide variety of woods. Canada alone among British Commonwealth countries has had a large exportable surplus of lumber for construction purposes. Scandinavia is our only serious competitor on world markets. In 1951 exports of planks and boards alone totaled $312 million, the highest on record. As in

	Millions 1946	Millions 1951	% Increase
Gross value, pulp & paper production	$527.8	$1,200.0	127
Value of pulp & paper exports	401.5	900.0	124
Newsprint produced, tons	4.5	5.5	22
Pulp produced, tons	6.6	9.1	37

the past our traditional customers—the United States and the United Kingdom—took the bulk of these shipments.

The conjunction of forest and water has made possible the development of our forest industries. Low-cost transportation of logs to the mills, provided by rivers and streams and in some instances the inland waterways and oceans, is naturally of major importance. However, water has uses beyond the transportation of logs or finished products. Some 250 tons of water may be used to produce one ton of paper. Then water is the source of hydroelectric energy, and at the present time 25% of the total consumption of electricity in Canada goes to our pulp and paper mills. The growth of the hydroelecrtic industry in Canada over the past twenty-five years has been due, to an important extent, to the development of the pulp and paper industry.

Turning from the forests themselves, let us consider what has been happening in the production end of the pulp and paper industry in Canada—an old timer in our economic picture. For years pulp and paper was given as a statistic along with nickel and wheat to point up Canada's importance in world trade. Since World War II, however, the economy of our country has been expanded in so many fields that the industry, having to share the spotlight, seems to have diminished in relative importance. Oil in our Prairie Provinces, iron ore in Quebec-Labrador, aluminum, base metals, titanium, chemicals, and other manufacturing have all demanded and received an ever-increasing amount of national and international attention.

Without minimizing in any way the currently more publicized aspects of our economy, it is well to keep in mind that in 1951 the pulp and paper industry was first in the following sectors of Canadian history:

1. Total wages paid.
2. Value of production.
3. Capital invested.
4. Export values.

The total value of pulp and paper production, at about $1¼ billion in 1951, exceeded the value of wheat and other grains combined. It is about equal to the value of Canada's total mineral production, including gold, and is close to twice as great as the production value of the automobile industry. It is our greatest export industry, with its $900 million last year, providing nearly 25% of all Canadian exports and about 35% of all exports to the United States.

Considering the rate at which other Canadian industries have been developing, growth and expansion of the pulp and paper industry since World War II had to be little short of tremendous to have maintained the leading position by so many criteria. That it has done so is only too evident from the comparative figures given in the table.

A survey conducted by the Canadian Pulp & Paper Association last year suggests that this trend may continue. This survey covered only existing manufacturers. It showed that plans for investment in the latter part of 1951 through to 1953, but not including new starts in the latter year, came to $245.5 million. If this figure were projected arithmetically through to 1955 and known new entrants were included, it was estimated that it would not be unreasonable to expect a total new capital investment of $600 million in pulp and paper facilities in the five years 1951 through 1955.

BIGGEST THING IN CANADA

If this estimate of investment is in any way realistic, it is the biggest thing going on in Canada today. To bring these investment estimates into sharper focus, the following investment plans of other industries over the same period 1951 to 1955 should be compared:

Aluminum smelting	$233 million
Other nonferrous metals	$150 million
Chemicals	$137 million
Petroleum & natural gas (exploration & development)	$300 million
Petroleum & natural gas (transmission & refining)	$213 million
Iron ore developments	$226 million

The $600 million of projected investment in pulp and paper production referred to exceeds any one of the projected other developments and amounts to nearly half as much as all of them combined.

If we look at the more immediate term, these estimates would seem a bit optimistic and should be shaded. More particularly so as recent statistics, covering production and shipments, suggest a close balance between supply and demand which means that some of the projects may be shelved until the outlook is clarified. This is not wholly unexpected in view of the spectacular growth in consumption of pulp and paper since the war end.

LONGER-TERM OUTLOOK

However, the longer-term outlook for the industry would seem to justify this seemingly sanguine projection when due weight is given to the fundamental change that has taken place over the past twenty years in the relationship between world demands for pulp and paper and wood resources. Today for every stick of pulpwood used for newsprint another stick goes into the manufacture of other products.

DEMAND FOR CELLULOSE PRODUCTS

Demand for cellulose products today is a very different thing from what it was in the past. Uses for wood fiber are constantly increasing—rayon, Cellophane, and packaging materials are just a few examples, and old and familiar uses are also expanding. Newsprint is a good example of the growth of demand as populations increase and living standards and literacy improve. Many countries are nearing an end to production growth because of the lack of additional trees—the basic raw material of the industry. This is particularly true of the other great exporting areas in Europe, and the Scandinavian countries. But Canada is more fortunate—her wood potential is far from exhausted and with sound reforestration should be prepared to supply, in perpetuity, the demands on her forests.

INTEGRATION OF OPERATIONS

More and more the trend has been toward integration of operations, particularly on the West Coast, whereby multiple unit operations—comprising sawmills, plywood mills, pulp mills, and various secondary industries consuming leftover wood—have been established with a view to complete forest crop utilization. This phase is still in its relative infancy in this country and promises to expand substantially the potential of our forest industries. More particularly so as the trend of the lumber industry itself is probably flattening out, owing to the development of competitive building materials. However, new horizons are visualized through integration and the consequent more profitable use of end products.

WORLD'S LOWEST-COST PRODUCER

To me this all adds up to the fact that in Canada there are present the necessary ingredients for us to continue as the free world's lowest-cost producer of forest products. In the face of growing world shortages the competitive position of the raw-material producer and the basic fabricator is growing stronger. No doubt surpluses will crop up from time to time but the long term seems to be one of mounting pressure on the supply side of raw materials.

OPTIMISTIC ABOUT THE FUTURE

On the basis of available data one cannot be other than optimistic about the future prospects. Although we must expect some fluctuations in demand, all evidence points toward further long-range expansion. Consequently, it is reasonable to expect that the rewards accruing are likely to grow. The industry in our country has never been better off financially as a whole and should be in a position to weather any minor dislocations that occur. From the investors' point of view the implications are that the securities of the well-entrenched companies should continue to provide a comparatively high return plus further capital growth. *(Applause)*

* * *

Chairman Hansen: I know there will be a number of questions. I want to ask you to address each question to one of the three speakers. Who has the first question?

John B. Marston (Ball, Burge & Kraus, Cleveland): I would like to ask Mr. Zellerbach to comment on profit margins in the industry.

J. D. Zellerbach: Well, that is rather a broad subject. I think I touched on it in my talk a little earlier. The profit margins as of today, I would say, are quite good for the older companies that own their plant and their timber at prewar costs. Profit margins in a new plant are, I would say, not too attractive at today's plant and timber costs. A very good example of that—it is easier, I think, to explain these things by citing a definite example—is a newsprint mill that a subsidiary of Pacific Mills is building in partnership with one of the British Columbia lumber concerns, Canadian Western Lumber Company, in spite of the fact that this plant will not be a complete plant, it will not have an economical pulp mill, and it has no power plant of its own to receive power from. The British Columbia Electric Company transmits it.

It will have economical pulp costs without any substantial aid from the Canadian Western Lumber Company. Now, the return on newsprint is the highest it has been since about 1921—I am not sure whether it is 1921 or 1926. For this incomplete plant, without a large investment in timber supply, because the timber supply is provided under a perpetual cutting contract with the Canadian Government, the cost will run over $90,000 per ton of daily capacity, as against what used to be considered a reasonable investment cost of about $35,000 for a complete mill. The return will run around 8%, after taxes. For a venture of that kind, that is not unreasonable, but it is really not a high enough return to attract substantial investment in the industry. Now that is not true of all grades of paper, since some show a better return on a new investment and some show perhaps not quite so good a return on an old investment. I want to differentiate. I want to emphasize that, if you earn 1952 dollars on a 1926 dollar investment or even on a 1935 investment, the returns are quite adequate, as you can see from the results shown by most of the older companies in the field.

Chairman Hansen: I would like to ask Mr. Weyerhaeuser to comment briefly on some of the developments in so-called "synthetic" lumber, particularly products such as the new plywood, and how they stack up strengthwise and relatively costwise?

J. P. Weyerhaeuser, Jr.: I don't understand very much about that. I think it is a very novel product, the new plywood, and no doubt it will have a place profitwise. We have new products with which I am more familiar. Newcomers in the field have to follow their buying market, and they are more in the nature of by-products. I think it is going to open a wide market, but not at a very large profit margin.

Chairman Hansen: Do we have any further questions?

E. J. Costigan (Edwin D. Jones & Co., St. Louis): I would like to ask Mr. Zellerbach his opinion of the immediate outlook for the paper industry?

Mr. Zellerbach: I think the immediate outlook is good. The industry is operating at better than 90% of capacity. I think the kraft branch of the industry is running something under that now. There is no doubt we are over the period when we were running 105% of capacity which, of course, is based on six-day operation, which used to be normal. The paper and pulp industry, and I think most other industries, considered in the past that, if you were operating somewhere around 85 to 90% capacity right along, you were doing awfully well. I have some figures on the paper industry in the last year. I won't take a lot of time to go into them. I can't think of many times in the history of the industry when we operated at anything like the capacity that we have in the last five years. Let's take the period of the '20's, which is supposed to be awfully good. We operated the industry at 78% of capacity, and the high point was in 1920 when we operated at 84%. In the '30's we averaged 71½% in the industry, and the high point was 82. In the period from 1939 to 1945, the industry operated at 88½%, and the high point was 95. So, of the twenty-six-year period, from 1920 on to the end of World War II, the industry averaged 78½%. Since then, 1946 to 1951, the industry has averaged 95.3% with the low point being 85%, and the high point 103% in 1951. During all this period, this last five years, the capacity of the industry has been increasing at a rather substantial rate. So I would say the answer to your question is: I think the industry is going through a period of readjustment, the liquidation of inventory all along the line—from the housewife who wanted to put a lot of stuff in the locker, when she thought she wasn't going to be able to get more during the war, or after the Korean war broke out; the grocer who bought a lot of paper bags; and so on. We shouldn't go through that period of readjustment. I think for the immediate future we will be interested to rock along about where it is now. I don't anticipate 100% operation for some time.

Chairman Hansen: I am rather surprised that no one has asked the question about newsprint prices, and so I want to throw that one to Mr. Moran. Do you want to comment, Bill, on where you think newsprint is headed?

W. T. Moran: I think that is a rather hard question to answer, but, if you will look at what happened to our dollar, in terms of the American dollar, the net return to our newsprint producers has shrunk considerably. Naturally there have been rumors to the effect that the price will be increased. It hasn't gone any further than the rumor stage, however, and I am afraid I am not in a position to comment on it. I have asked people in the industry, and they sidestepped the question. Purely as a guess, I think there might be some increase to compensate, first, for the decline in the net being received by our Canadian producers. Of course, pay rates of paper have gone up a bit. I look for some adjustment either through price or through contracts regarding f.o.b. mill. That has been rumored, too, but, of course, that is only in the projection state.

Chairman Hansen: Thank you, Bill.

George P. Shettle (N. W. Levin, New York): I would like to ask about the per capita consumption of lumber. What will the per capita consumption trends be over the next few years, or the next five years?

Chairman Hansen: Do you direct that to Mr. Zellerbach or to Mr. Weyerhaeuser?

Mr. Shettle: Mr. Weyerhaeuser.

Mr. Weyerhaeuser: I don't think I know the answer to that. There are certain estimates that should be made of future requirements for lumber from time to time. The population increase has been very heavy. The assumption has been that we were going to use the same amount of lumber per capita to arrive at rather fantastic future requirements of lumber. I purposely did not predict what I thought was going to happen. I don't think any of us can make a guess. We have too many different kinds of competitive building materials—including some made out of wood—to figure what any particular item of lumber is going to be necessary, or to be able to compete in the market with many, many items—you just think about building as it is today, and see the items that have gone into the building industry the last five years, and, out of the items that were used, or were to be supplied in lumber completely, it will be apparent to you that prediction is almost impossible.

Chairman Hansen: I am afraid our time is up. On behalf of the analysts convened, I want to thank Messrs. Moran, Weyerhaeuser, and Zellerbach for co-operating with our National Federation so splendidly. *(Applause)*

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Dividend Notice

Directors of the American Viscose Corporation at their regular meeting on July 2, 1952, declared dividends of one dollar and twenty-five cents ($1.25) per share on the five percent (5%) cumulative preferred stock and fifty cents (50c) per share on the common stock, both payable on Aug. 1, 1952, to shareholders of record at the close of business on July 16, 1952.

WILLIAM H. BROWN
Secretary

DIVIDEND NOTICES

OLIVER

Common Stock Dividend:
The Board of Directors has declared a quarterly dividend of 60 cents per share on the Common Stock, payable July 2, 1952, to shareholders of record June 6, 1952.

Preferrd Stock Dividend:
The regular quarterly dividend of $1.12½ per share on the 4½% Cumulative Convertible Preferred Stock has been declared payable July 31, 1952, to shareholders of record July 15, 1952.

ALVA W. PHELPS
Chairman of the Board

A. KING McCORD
President

THE OLIVER CORPORATION
Chicago, Illinois

GOODYEAR

DIVIDEND NOTICE

The Board of Directors has declared today the following dividends:

$1.25 per share for the third quarter of 1952 upon the $5 Preferred Stock, payable September 15, 1952 to stockholders of record at the close of business August 15, 1952.

75 cents per share upon the Common Stock, payable September 15, 1952 to stockholders of record at the close of business August 15, 1952.

The Goodyear Tire & Rubber Co.
By W. D. Shilts, Secretary
Akron, Ohio, July 16, 1952

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Source: *Douglas, Paul H., *Real Wages in the United States, 1890–1926.* Bureau of Labor Statistics, *Industry Report for May, 1952.* **What the 1890 dollar and the 1952 dollar would actually buy. *Source:* The National Industrial Conference Board.

Because of these tools, he can produce more and thus create many times more wealth with his day's work. *And the more wealth he creates, the more he earns.*

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UNION OIL COMPANY
OF CALIFORNIA

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This series, sponsored by the people of Union Oil Company, is dedicated to a discussion of how and why American business functions. We hope you'll feel free to send in any suggestions or criticisms you have to offer. Write: The President, Union Oil Company, Union Oil Building, Los Angeles 17, California.

Manufacturers of Royal Triton, the amazing purple motor oil.

The Petroleum Industry

MONDAY AFTERNOON, MAY 5, 1952

ROBERT COLTMAN, Philadelphia National Bank, Philadelphia, presiding.

Chairman Coltman: I have been asked to announce that at the end of this meeting the participants in the Pacific Northwest field trip will meet in the rear of this room. It is necessary to have every one going on that trip present in order to handle certain details of the arrangements.

Before we launch into the oil industry, I should like to bring greetings to the host Society of this year from the host Society for the 1953 Convention in Philadelphia. That is, we will be the host Society next year if we survive the trip home. Relatively few Philadelphians survived the westward trek because we were attacked by hostile tribes at Little Big Horn, Wyo., and were nearly wiped out by Gray Line bus drivers on the Monterey Peninsula. When you come East next year, "you can bring Rose, with her turned up nose," or you can bring Mabel that snapped her cable, *but* don't bring those bus drivers! *(Laughter)*

You San Francisco fellows are really making it difficult for the East Coast boys that will have Conventions in the years ahead. We don't have the Top of the Mark, Telegraph Hill, or Barbary Coast. As a matter of fact, one unkind wag has called Philadelphia, where I hope you will meet with us one of these days soon, "the only graveyard in America with lights." *(Laughter)* But we still hope you will come to Philadelphia. I want to tell you about a drunk, one night, who came weaving up to the information desk at Grand Central Station in New York. He was wavering pretty badly, and he asked: "Is this the way to go to Philadelphia?" The information man said, "Bud, that's the only way to go to Philadelphia." *(Laughter)*

The only fellows who wouldn't be interested in this petroleum forum are those who don't own a piece of the industry, and they are annoyed because they missed the boat. Myabe there's still time to get aboard: Your Convention chairman knew this was the best forum of the day and the only one that could compete with the Old Forester Hour.

We are going to change the order of the speakers. Mr. Robert L. Minckler will be the first speaker. He started as an "oil boy" for Great Northern and filled and carried oil cans. He went to the University of Washington, was a purser for Trans-Pacific Steamship Line, worked as an accountant for Southern California Edison, and in 1924 went to General Petroleum, a Socony-Vacuum subsidiary, where he rose rapidly to the presidency.

During World War II he did a job for which we are all indebted to him, the terrific job of meeting the almost impossible requirements of the military on the West Coast, as Director of Petroleum Supply for the Petroleum Administration for War. He is still engaged in the task of supplying American Armed Forces in Asia.

I am told he wrote his own speech. He always does. There isn't anybody in the company good enough to write it for him. The other things we learned about him are that he works with his feet on the desk, smokes Fatimas, answers his own telephone, is a numbers wizard, has a disarming modesty about the technical side of the oil business, and, it says here, is "allergic to work." To me a significant thing is that, when in his trade paper, the company house organ issue of March 1952, he asked his employees for suggestions and got 1,700 of them, he thanked them for the suggestions, and had this to say to them: "Perhaps the most remarkable thing about these suggestions is that not one suggestion was made that the president of the company be fired, for which I am grateful." Mr. Minckler. *(Applause)*

* * *

Robert L. Minckler: Mr. Coltman, and gentlemen, in considering "Oil Supply and Demand in the West," it is necessary that we keep in mind all of the time the importance of oil in the economy of our area. In the Nation as a whole the products of our industry—oil and natural gas—provide about 56% of the energy used by the people. In the western states more than 90% of the energy used comes from oil and gas. In other parts of the country industrial and commercial plants using large volumes of oil can be converted to use coal without severe economic penalty, but that is not so here, because we do not have cheap coal supplies. The continued growth of industrial activity in the West is dependent on adequate supplies of oil and natural gas.

Leaders of the petroleum industry forum (*left to right*): Albert C. Mattei, Robert Coltman, chairman, Robert L. Minckler, R. G. Follis, and Gilbert Palmer

George Shimmon

HISTORY OF CHRONIC SURPLUS

The past history of the California oil business has been one of chronic surplus, except during wartimes. These surpluses flowed out past our economic market limits and into markets in which we had no economic right to be. We are now at a point where this situation will no longer prevail. We are in the process of changing from an economy of surplus to one of balance and then to one of shortage.

TWO PRINCIPAL CAUSES

This change is due to two principal causes. Despite an aggressive exploration program in California, the industry has failed to find enough important new oil fields to improve our reserve position. The demand for oil products has increased at a rapid rate. A little later I will discuss our prospects for new supplies and our demand outlook.

Now I want to take a look at our current, short-term situation from which we may draw wrong conclusions concerning the long-range posiiton. Currently, we are short of all classes of products. Our inventories of crude oil and products are 81 million barrels, which is a very low level, representing only 73 days' over-all supply. Total demand during 1951 and for the first quarter of 1952 has been running about 35 thousand barrels per day in excess of current supply. This current situation is due to the Korean war and to the loss of supply from Iran.

MILITARY DEMAND HAS RISEN

Before the Korean conflict, the military demand in this area was 65,000 to 70,000 barrels per day. Last year (1951) this demand averaged 110,000 barrels per day. So long as inventories on the Pacific Coast were in excess of working levels, I suppose it was correct procedure to supply military needs from them, but now that the surplus is all gone I believe that we should view the supply of military products as a national problem, not as a West Coast problem. I do not believe that the California district can be expected indefinitely to supply one half of the military requirements with only one sixth of the crude oil production of the country, as we have been called upon to do. I hope that the governmental agencies in Washington and the industry east of the Rockies will accept that as a sound policy and shift some of the direct military demands to other shoulders able to bear them.

IMPACT OF KOREAN WAR

We have felt the impact of the Korean war and the accelerated defense program in areas other than direct military requirements. For example, before June 1950, heavy fuel oil requirements of our railroads were about 55,000 barrels per day, and they were declining as the railroads replaced their steam locomotives with Diesel engines. The military and industrial activity during the early phase of the Korean war, when men and supplies were being rushed to the combat area, required the re-employment of many laid-up steam engines, and railroad heavy fuel oil demand here rose to over 70,000 barrels per day. However, as additional Diesel units became available, and military movements of men and supplies changed to a replacement and maintenance basis, railroad usage resumed its previously established pattern of decline in heavy fuel usage as Diesel oil usage increased.

Another important increase in demand has been in the use of heavy fuel oil for ships' bunkers. This is running at almost 25,000 barrels per day more than the pre-Korean level. This large increase is partially the result of the Korean war, which has brought a considerable number of merchant vessels out of the mothball fleet, and is partially due to the fact that fuel oil bunker prices on the Pacific Coast have been very much lower than at any other place in the world. I do not know if the present high level of Pacific Ocean shipping will be maintained, but I believe that it is a reasonable expectation that the price differential which has favored West Coast bunkering of vessels will—in time—be eliminated, and some bunker business will be shifted to East Coast, Gulf Coast, and Panama Canal ports.

SUPPLY SOME FOREIGN MARKETS

A new demand was placed on California oil when the Iranian oil fields and the Abadan refinery were closed down in 1951. At that time there was an immediate demand on the West Coast petroleum industry to supply some of the foreign markets which had previously depended directly or indirectly upon Iranian oil. This new demand on California during the second half of 1951 amounted to approximately 51,000 barrels per day. I anticipate that during 1952 these added California exports will gradually be eliminated as worldwide supply and demand is again restored to an economic balance.

DUE TO TEMPORARY CAUSES

From the foregoing, it is clear that the currently acute oil supply situation in the West is due largely to what are, we hope, temporary causes—the Korean war and the loss of Iran as a source of supply. The effect of these events on California oil demand cannot be calculated exactly, but it is probably of the order of 140,000 barrels per day. About 35,000 barrels per day of this extra demand came from inventories, about 20,000 barrels per day from unusual imports, and 85,000 barrels per day from current supply.

Let us look at it in another way. We think that the civilian and industrial demand in our natural market area will be about 915,000 barrels per day for the next few years. About 135,000 barrels per day of the supply required to meet that demand will come from condensates, natural gasoline, liquefied petroleum gas, and from imports; so the California crude oil requirement for our local civilian markets is only about 780,000 barrels per day. With crude oil production of about 980,000 barrels per day at the present time, it is evident that the local civilian market can be met from our own production for several years, even without any important discoveries. Of course, there are still the military and off-shore markets to be supplied.

MILITARY REQUIREMENTS 50% HIGHER

Is I said, military demand, pre-Korea, was running at 65,000 to 70,000 barrels per day. I expect that, with the continuing rate of military activity which now seems unavoidable, a new normal level of military requirements—even assuming no shooting war—will be perhaps 50% higher, or say 100,000 barrels per day.

As to off-shore shipments, about 65,000 barrels per day now move to areas where California has a transportation advantage over competitive sources of supply, but that figure includes about 40,000 barrels per day to British Columbia, a market that will be lost as soon as the pipe line from Alberta to Vancouver is completed in 1954.

So, what we might consider our normal demands in our natural market area, say in 1954, will be as follows:

Domestic civilian demand	915,000 barrels per day
Military demand	100,000 barrels per day
Offshore demand	25,000 barrels per day
Total demand	1,040,000 barrels per day
Less:	
Supplied from other raw materials and sources outside California	135,000 barrels per day
California crude oil requirement	905,000 barrels per day

It seems apparent that the present productive capacity of California oil wells is some 75,000 to 85,000 barrels per day in excess of normal demand in natural markets. This is not very much fat, but it certainly does not indicate an immediately critical short condition.

NOT BOTHERED WITH SURPLUS PRODUCTS

On the other hand, we will certainly not be bothered with surplus products for the next two or three years. We will still have the Canadian market to supply, and we should build up more inventories. Any production in excess of normal demand in natural markets will be used for abnormal military demand and in unnatural markets, until the world comes to its senses and settles down.

2 OR 3 YEARS OF BALANCE

I look for a period of two or three years of balance between local supply and demand. That will not be exactly true at any particular time, because emergency military demands, variations in the timing of completion of oil and gas lines, volume of rainfall, fluctuation in general business conditions, any one of a number of variables, can throw the figures one way or the other, but in a broad, general way we will be in balance, no surplus and no shortage.

CONFLICTING TRENDS

From 1955 on, there are conflicting trends of future demands. To increase demand, we foresee a steadily increasing population, with more motor vehicles to fuel with gasoline, more homes to heat with burning oils, and more steam-electric generating equipment using heavy fuel oil. To decrease demand, we foresee the continued conversion of railroad locomotives from steam to Diesel, the loss of some ship bunkering business, and the construction of new natural gas lines, bringing in gas which will displace some fuel oil used in industry and which will retard the rate of growth in oil home heating. A reasonable guess is that these conflicting demand trends will about offset each other for a few years, and so the question of supply and demand in the West comes down to this: "Can California continue to produce crude oil at the current rate for the next several years?"

CLOSE TO PRODUCTION CAPACITY

We are currently producing 975,000 to 980,000 barrels per day, which is close to our production capacity at this time. We have had a very low development drilling rate for about three years, principally because of the temporary oversupply of oil in 1948 and 1949. We completed 2,150 producing oil wells in 1948, 1,777 in 1949, only 1,264 in 1950, and 1,719 in 1951. We now have a pretty small inventory of high-grade undrilled proved locations, and even an accelerated development drilling campaign to the level of 1948 would not run our efficient production capacity to over 1 million barrels per day. At that rate the quality of our remaining undrilled locations would be of a very low order, and their drilling would not offset natural decline. Then we would become dependent on presently undiscovered reserves to maintain productive capacity.

DISCOVERIES IN CALIFORNIA NOT ENCOURAGING

The record of discoveries in California in the past few years is not encouraging. The only first-class oil field found during the past ten years is Cuyama, and even Cuyama looks small when measured against a demand of 1 million barrels per day. Probably there are a few more Cuyamas lying around somewhere in California, and many more small fields will, of course, be found, but the present prospect is that the finding costs will be high and the rewards small.

TWO IMPORTANT PRODUCTION POSSIBILITIES

You will note that I am leaving out of consideration two important production possibilities: the Elk Hills Naval Reserve and the undoubtedly large discovery possibilities off shore. We all know the political impossibility of counting the Naval Reserve as a source of potential supply. The soundest prophesy for that oil is that it will still be there after a new source of energy has displaced oil, thus continuing its so far unbroken record of complete uselessness.

In somewhat the same position is oil in the submerged lands off shore. There is, no doubt, a very large volume of oil waiting to be discovered in structures off shore from California. With the Federal Government's seizure of these submerged lands, they have become a political issue and for a long time will be a source of political trading and speech making instead of a source of energy for the use of the people. These potential reserves cannot be counted into our assets until the political picture changes. Even then oil from the submerged lands will be high cost and will become available at slow rates.

SHORTAGE OF CRUDE

As I see the picture, we have enough oil in California for a very few years more, but I believe that we are approaching finally the day when there will be a shortage of over-all local crude oil production. I would put the date at 1955.

This does not mean that there will be an oil shortage in the West, because the Pacific Coast oil industry will do whatever is necessary to meet the demand. Already some moves to bring in oil have started, and, as individual companies get in short supply, the movement of oil into the West will increase.

I rate the new Alberta oil fields as the most likely to become an early source of extra supply for the West Coast. The Trans-Mountain Oil Pipe Line is now under construction and will be completed in 1954. The first movements will be to supply the British Columbia market, but the line is being built so that it can move up to 200,000 barrels per day. With present well head prices in Canada and with the present import duty on imported oil, Canadian crude cannot be landed on the West Coast of the United States and compete with California crude oil at present prices, but these price differentials will somehow disappear if there is pressure from surplus producing capacity in Canada, or pressure from product demand on the Coast. If and when Canadian oil becomes an important source of West Coast supply, it will mean the development of an oil-refining industry in the Pacific Northwest.

UINTA BASIN LIKELY SOURCE

After Canada I would rate the Uinta Basin of Eastern Utah as the next most likely source of extra supply for our area. This is largely an unexplored region, but some important discoveries have been made there, and an aggressive exploration program is under way.

Other possible sources of important volumes of crude oil for our area are the western part of the Rocky Mountain region, eastern Nevada, and the San Juan Basin of New Mexico, Colorado, Utah, and Arizona. These basins are relatively unexplored, and no important discoveries have been made, but they are large sedimentary basins with plenty of room for big oil fields.

I take a dim view of the movement of west Texas crude oil to California, when compared with the movement of Canadian oil to the Pacific Northwest. Logistics favors the Canadian movement by a wide margin.

STATISTICAL SURPLUS OF REFINING CAPACITY

As to our refinery situation, we have a statistical surplus of refining capacity. The quality of this surplus is poor, consisting mainly of straight-run units which cannot profitably operate at the existing levels of crude oil and products prices. There is some inefficient refining going on now, probably as much as there is efficient capacity in idle units. I do not believe that there is any over-all excess efficient refining capacity in this district. Some new capacity is now being built, and additional capacity will be built, probably in the Northwest.

Also, as I see the pattern of product demand over the coming years, the light product requirements for gasoline and distillates will increase and the heavy fuel demands will decrease. I expect that additional cracking facilities are going to be required in our refineries.

CLOSE TO BEING IN BALANCE

We are coming into a period in which crude oil productive capacity, refining capacity, and market demand are very close to being in balance, each with the other. Some very large and important decisions affecting the future growth of the industry will have to be made. They will take foresight, skill, and courage, but these are the things with which our industry is well endowed. I have no doubt whatever that we will continue to supply the people of this area with all of the oil products they wish for as long as they wish them, at prices that will not restrict or limit the growth of the area. Other factors, not the supply of energy or its cost, will determine how many people ultimately come here to live. All of these forecasts are based on two hopes.

These are:

1. No general war engulfing the world.
2. No further loss of freedom in the United States.

There is no limit to the wants of a free people in a peaceful world. Also, there is no limit to the ingenuity of the American oil industry to supply those wants if it can retain its freedom to plan, to risk, to try, to succeed, to fail, and try again. It can be done, but it cannot be done through war or through the bureaucratic restrictions on freedom, for which war is the excuse. *(Applause)*

* * *

Chairman Coltman: Thank you, Mr. Minckler.

Our next speaker is Mr. A. C. Mattei, who is also an alumnus of General Petroleum, having been there from 1919 to 1921. Also, an alumnus of Stanford University, and a geologist. He joined Honolulu Oil in 1921 and became president in 1937. He is a native of California and the son of parents who ran "Mattei Inn" in Santa Barbara County. His first job was to supply family and guests with fish and game, and he is an awfully good shot with a 0.410 shotgun, which is a pretty small gun. He doesn't like to work very hard either. He has a Chesapeake Bay retriever. He is a tough man at poker, and especially good at dominoes. Mr. Mattei is also a tough man in the oil industry. He has built his company from 2,500 to 30,000 barrels daily, a leading independent producer. The original plan was that he would speak for 23 minutes on the subject of "Prospecting in 1952," and for two minutes on Truman. He tells me it won't take him that long to finish Mr. Truman off. *(Applause)*

* * *

Albert C. Mattei: Mr. Coltman, ladies and gentlemen, from the applause, I think I should speak to you about Truman first, but we will deal with him later.

DEALING WITH A GROWTH INDUSTRY

We in this forum are dealing with a great growth industry. In the past fifteen years, for example, production, demand, and costs within the oil industry have more than doubled, and the yearly rate of capital expenditures has increased considerably more than that.

1951 PRODUCTION

During 1951 the average production of crude and natural gasoline within the United States was 6,712,116 barrels daily, and the indicated production rate for 1952 probably will be in the neighborhood of 6,900,000 barrels daily if demand continues to increase at normal rates established since 1945.

Proved oil and natural gasoline reserves in the United States at the end of 1951 were estimated at 32,192,633,000 barrels, and western Canada was credited with 1,376 million barrels as of that date.

RELATIONSHIP TO WELLS DRILLED

Historically, the discovery rate of new oil has had a direct relationship to the number of wells drilled, and so, in a general way, we may say that, when the industry is prosperous and materials are available, large amounts of new oil are found owing to the heavy rate of drilling. We find, however, within the last year or so that, although the upward trend of reserves has followed the rate of drilling, the estimated rate of new barrels of oil discovered has decreased with relation to footage drilled. To say this another way: We have been drilling deeper and deeper, and, although we are finding new oil, the discovery rate per well or per foot drilled is not so great as it was in former years. This, of course, results in sharply higher costs per barrel of new oil discovered.

GREAT DRAINS ON OIL RESERVES

During the First and Second World Wars, great drains were made on the oil reserves of continental United States. In each war the use of petroleum products increased materially, and, because of the many new uses developed during the war, as well as pent-up demand, the period immediately after each war has been one of threatened short supply.

SHORTAGE IN 1920

More or less typical is the condition of shortage in which the industry found itself in 1920, when the Geological Survey estimated the remaining oil in the ground at 7 billion barrels and made the following statement about the future supplies of petroleum in its annual report to the Congress. I quote:

> Fortunately, it is simply impossible to discover and take out the oil remaining in the ground in the United States, 7 billion barrels, in so short a period as 18 years. Instead of mining our petroleum so rapidly we must either depend more and more on oil from other sources or get along with less oil. Our children will doubtless do both.

Since 1920 there have been produced in the United States about 38 billion barrels of crude oil, and by the end of 1951 the crude oil and natural gasoline reserves exceeded 32 billion barrels.

The same attitude was expressed by some governmental agencies with respect to the oil reserves and availability of petroleum after the Second World War. The Government is still talking about how to augment the supplies of petroleum, either through synthetic sources or by cutting down the uses. All of this talk leads to Congressional investigations and wide publicity, but the industry continues to find new reserves.

OPERATORS MUST BE PROPERLY REWARDED

A climate must be maintained in which the operators facing hazards of finding new oil will be properly rewarded or the industry cannot maintain itself. Evidence that the economic and political climate are of great importance to the finding and development of new oil reserves is found in the fact that in the year 1910 the total world oil production amounted to about 400,000 barrels daily, one half of that being produced in Russia. Skipping that long intervening period between 1910 and 1951, we find that the area under Russian domination is now estimated to be producing about 1 million barrels daily, and the free world production is about 11 million barrels daily.

AMERICAN COMPANIES HAVE TAKEN LEAD

The American oil companies have taken the lead over all the rest of the world in the finding and development of new oil at home and abroad. This has occurred while other countries were losing out rapidly in the field of oil development in foreign lands. These foreign fields found by the American oil companies and developed by them are of great importance to us as a Nation in time of peace, and are vitally important in time of war.

PROSPECTING END IMPORTANT

Because of the rugged nature of the industry and the necessity for finding so much new oil, the exploration or prospecting end of the business has been extremely important to its growth. The prospecting and exploration pattern as it appears for 1952 is about the same as it has been in the past years, except that emphasis may fall in different wildcat areas, and the tempo of exploration may be speeded up more than in past years.

COMPLICATED SERIES OF MOVES

Exploration or prospecting for oil and gas is a complicated series of moves that seldom have the same pattern. It starts as a rule with the geologists selecting an area for study, or for leasing if the lands can be acquired for some reasonable price and for a long enough period. After the desired lands are leased, geological or geophysical work, or both, is started to determine whether or not the lands acquired are of value for further prospecting by drilling.

In other cases geological and geophysical work is done in more or less detail, and then the lands are acquired. Many times, however, when this method is used some one else has leased all or a part of the lands desired by the time the work is finished, thus complicating the problem. There are many other methods, but they are usually variations of either or both of the above.

PRELIMINARY WORK EXPENSIVE

The cost of this preliminary work can be very expensive, dependent on the competition for lands within the area of interest. A single seismograph crew costs from $15,000 to $20,000 per month, and it is not uncommon for the cost of the geophysical work alone to be as much as the actual drilling of a wildcat well. It is, at any rate, safe to assume that, on the average, the cost of the preliminary work will equal the cost of the first wildcat test.

The search for oil in the United States over a period of years has more or less followed the same pattern. Until about 1890 oil prospecting took place largely in Pennsylvania, New York, and Ohio. Those areas were intensively worked and drilled until somebody came along about 1900 and found an abundance of oil in West Virginia, Indiana, and California, and the scene of major activity changed to those areas. By 1910 Illinois, Oklahoma, Texas, Kansas, and Louisiana were added to the list of states producing in excess of 1 million barrels per year.

In the exploration process, substantial production was encountered in the '20's in Wyoming, Kentucky, Arkansas, New Mexico, Colorado, and Michigan. In the '30's Mississippi, Nebraska, and Utah were named on the list of producers, and last year North Dakota, Florida, and Alabama became oil-producing states.

STATE BOUNDARY NOT IMPORTANT

Of course, it is not the state boundary that is important; the important thing is the fact that we have many large sedimentary areas in the United States that are a possible source for oil. The total sedimentary area that has prospective possibilities is hundreds of times greater than the area now producing oil. In addition, we have a vast area of coastal submerged lands and on the continental shelf in the Gulf of Mexico. The American Association of Petroleum Geologists last year published a symposium indicating that prospective oil provinces in continental United States comprise about 1,660,000 square miles and include great areas favorable for oil accumulation that are not now productive of either oil or gas.

It is extremely important to realize that there are many geologic provinces not now producing which some day may be productive of oil or gas, and within the next few years, if not in 1952, wildcat wells will be drilled in many places where today practically no geological work has been done looking to the finding of new oil.

PROSPECTIVE OIL AREA IMPRESSIVE

The size of the prospective oil area is certainly impressive, and, when one realizes that a total of only 140,000 exploratory wells have been drilled in the United States through the year 1950, it is easy to contemplate the large areas still remaining for exploration. It can be expected, though, that less than 1 or 2% of the land in these areas will actually be productive.

Statistics show that during the year 1950 only 150 exploratory wells were drilled in the following 15 states: Arizona, Florida, Georgia, Idaho, Maryland, Missouri, Nebraska, Nevada, North Carolina, North Dakota, South Dakota, Oregon, Utah, Virginia, and Washington. It is obvious that the size of this prospective oil area will take many years of intensive search before we will really know whether or not it has prospects for oil or gas.

It takes a long time to explore a new province and develop its possibilities. As a matter of fact, many years may elapse and intensive development be carried on and still valuable new deposits of either oil or gas or both may remain undiscovered.

SPINDLETOP

Spindletop, for instance, was discovered in 1901, and in the next few years some other fields of a similar type were discovered along the Gulf Coast. However, it was not until the 1930's that many new large oil fields were discovered in the coastal area. In fact, Spindletop itself has been completely developed twice; yet today a new exploratory and development campaign is in progress on Spindletop Salt Dome. New fields and new pools are constantly being discovered in this area by improved exploration methods more intensively applied.

BUENA VISTA HILLS

Buena Vista Hills in California was discovered and development started in 1910. The oil field has been drilled up for many years, but in 1943 the Standard Oil Company of California while exploring for a deeper zone found what is known as the 27-B pool, which is in an extremely prolific area. Within the last 30 days the Standard Oil Company, while exploring another part of the Buena Vista Hills structure, brought in a well in a new zone at approximately 4,000 feet. Many wells in the Buena Vista Hills had drilled through this zone, but it never was tested before. Today it is considered as being the opening of a new pool.

Increasingly intensive exploration will continue to develop new fields and enlarge old fields for many years to come. Though it is true that a large part of the new oil to be discovered will come from new areas, A very substantial part will come from the development of deeper zones or structures adjacent to proven producing areas.

It has been the nature of the industry to expend most of its efforts in areas of known productivity and especially where transportation and other facilities necessary to market the oil are available. This leaves large areas with fair prospects that have not yet been explored to the degree necessary to find a new field. Once a significant discovery is made, facilities follow, and the area may then be actively explored.

HIGHER COSTS

The wildcatter who goes into a new area for exploration encounters higher costs due to lack of drilling supplies locally and because it is expensive to move drilling equipment long distances. Also he is faced with an indefinite period during which the oil he finds cannot be marketed easily. Balanced on the other side of his ledger, however, is the fact that the wildcatter in remote areas has for the time being less competition and probably is able to secure at a reasonable cost large blocks of acreage upon which to drill. Therefore, if he should strike oil, his financial return is greater in proportion to his cost than in an area of more intensive competition.

ADVANCES IN TECHNOLOGY

There is an excellent chance that within the next few years we will witness steady advances in the technology of finding oil. Large amounts of money are being spent on research along every conceivable avenue that would lead ultimately to the better interpretation of the data that we have, and the adding of new types of information leading to the discovery of oil.

There have been rapid advances in the last thirty years in the development of geological knowledge, the interpretation of geophysics, and other scientific methods of exploration. About 1920 the principle of physics that sound travels at different rates, dependent on the hardness or softness of the formations of the earth surface, was determined to be a geological tool.

REFRACTION SEISMOGRAPH

It was this principle that developed into the refraction seismograph, the first successful geophysical tool for finding oil. Small explosions of dynamite were used to create the sound waves, and the equipment was located in such a manner as to measure the energy reflected from underground strata. This permitted reasonably accurate interpretations in such a manner that subsurface conditions could be determined. By 1930 or thereabouts these methods of exploration had been perfected and were largely responsible for the finding of so many salt domes in the Gulf Coast area as well as hidden structures in other areas.

GEOPHYSICAL FIELD

Intensive scientific development is still continuing in the geophysical field. Subsurface geology or the examination of the subsurface of the earth from the study of wells drilled has also advanced. Electric logging or radioactive logging provides much useful scientific information, and such instruments as the dip meter, which determines the angle of beds in the drilled hole, all add to the scientific knowledge necessary to the finding of oil.

The prospecting or exploration for finding new oil reserves has become largely scientific. There was a time when much of it was done by guess or by hunch, but that method does not pay, because investigation indicates that about 20% of the wildcat wells drilled where scientific methods are used may be expected to find oil, whereas those drilled by hunch, or at random as we call it, resulted in only about 3% finding any oil or gas.

There has been much improvement in the progress of drilling and gathering information as wells are drilled to depths unheard of a few years ago. One well now drilling in Mississippi has reached a depth in excess of 20,000 feet and is still drilling ahead. A few years back it was unusual for wells to be drilled below 10,000 feet. Now it is common to drill and complete wells at 12,000 or more feet without much difficulty.

DEVELOPMENT OF DRILLING TECHNIQUE

The development of drilling techniques and the exploration processes used by the industry give evidence of their success by the fact that today we are producing more oil than ever, and our proven underground oil reserves are increasing each year.

In 1951, the industry drilled 44,826 wells in the United States, of which 38% were dry and abandoned because oil or gas was not found in commercial quantities. Of the dry wells, about 7,000 were not classed as wildcats, but were wells drilled adjacent to production. Of the total wells, 10,032 were classed as wildcats, and of them 82% were dry holes, the remainder discovering oil or gas in some quantity.

1952 PATTERN SIMILAR TO 1951

The expectation for 1952 is that it may follow a somewhat similar pattern to that of 1951, but with over 82% of the wildcats proving dry holes.

In order to complete the drilling of 44,826 wells, which is an all-time high for the United States, 3,021 rotary rigs were employed. About 22% of the wells drilled were wildcats. The percentage of wildcats to the total number of wells drilled is increasing very rapidly. In 1937 of all the wells drilled 6.7% were wildcat; in 1950, 18.7% were wildcat. The percentage of wildcat wells to total wells should be higher in 1952 than it was in 1951.

18-MONTH EXPANSION PROGRAM

The Office of Defense Mobilization has advanced a program for the expansion of the oil industry for the 18-month period after June 1, 1952, and it is estimated that it will cost the industry $10 billion. The expansion program with respect to exploration and development calls for the drilling of 90,128 wells. This is at an annual rate of nearly 60,000 wells or approximately one third more than the record year of 1951. It is going to require the building of new drilling equipment at a tremendous rate, and, if it took 3,000 rotary rigs to drill 44,000 wells, it will take over 4,000 rigs to drill 60,000 wells.

The industry has estimated that 46,000 wells would be drilled in 1952 and that it was possible to expect 50,000 wells in 1953. This, of course, is all predicated on the fact that steel will be available not only for oil well pipe but also for pipe lines for the transportation of oil and gas and for the construction of other facilities, including refinery equipment.

It is difficult at this time to reconcile the anticipated exploratory program of the industry with the announced program from Washington. As of the present, it would seem that the industry expectations may be reached, but that the Government program will be almost impossible to achieve.

EXPLORATION PROGRAM FOR 1952

The exploration program for 1952 no doubt will be the most extensive ever carried on by the industry. On that account it may be interesting to survey briefly the various areas where most of the activity will occur.

Of course, the most active area will continue to be west Texas and eastern New Mexico. There were in operation 79 seismic parties at the end of 1951, 5,383 wells were drilled in 1951, and it is expected that almost 6,000 will be drilled in 1952.

SPRABERRY TREND

The Spraberry Trend, which has seen very intensive exploration and development, probably will not be developed so rapidly as was so in 1951. Wildcatting will continue actively in the entire province, because the rate and qualities of the discoveries have been good.

WILLISTON BASIN

Next in the public eye probably is the Williston Basin. This is a large province that has had little or no exploration except in two or three local areas. It comprises North Dakota, a part of South Dakota, a part of Montana, and a large area of Southern Saskatchewan and Manitoba. Seismograph crews numbering 90 are operating at the present time, and this number no doubt will be increased materially within a short time. Weather conditions have been a serious handicap to the development of the area during the winter period, but 25 to 50 new wildcat tests can be expected to start this summer.

The Julesberg Basin, occupying a part of southeastern Wyoming, northeastern Colorado and western Nebraska, has been the most active area in the Rocky Mountain region. Since 1949, 48 new fields with 250 proven wells have been discovered. Approximately 275 dry wildcat wells have been abandoned. Although the fields are small, the drilling is not expensive, and there have been from 45 to 50 seismograph crews operating in the area during the past year. This basin covers approximately 100,000 square miles and can be expected to continue as an active area with future discoveries.

Kansas will continue to be the scene of active exploration with many new fields being found. Most of them will be prolific but generally small in areal extent.

Western Canada, including Alberta and Saskatchewan, should continue to be extremely active in 1952. The program of exploration for 1952 will extend northward into the Northwest Territory and part of eastern British Columbia. Expenditures may reach $250 million. There were 140 seismograph crews active in Canada at the end of 1951. A total of 1,371 wells had been drilled, of which 430 were dry, 816 were oil wells, and 125 gas wells. Exploration of this area will continue and probably extend into Saskatchewan, which only recently has shown oil discoveries of commercial importance.

BLACK WARRIOR BASIN

Northeastern Mississippi, or the Black Warrior Basin, probably will be an area of considerable development. A wildcat well which had been abandoned in 1946 was opened up by two independent operators in the fall of 1951. The well blew in, making approximately 30 million cubic feet of gas per day and 100 to 200 barrels of distillate. This opened up a new area of prospecting. At the present time there are approximately 1½ million acres under lease here, and exploratory work is progressing rapidly, with several new wildcat wells projected this year.

Southern Alabama and Florida recently have had a boom due to the discovery by the Humble Oil & Refining Company of a well making about 350 barrels per day of 30 gravity oil near Pollard, Ala., which is close to the Florida line. This area has seen a leasing boom also that will lead to new developments.

MIDCONTINENT AREA

There will be a continued and intensified effort in the midcontinent area, and new discoveries are continuing to be reported from north Texas, Oklahoma, and Arkansas. The Gulf Coast, of course, will continue to see an intensive exploratory program, as has been going on over a long period of years.

California will continue to be prospected most intensively, and unquestionably future discoveries can be anticipated from the large number of wildcat wells projected for the year. The Richfield Oil Company's discovery near Wheeler Ridge looks as if it may be important, and future developments will indicate size.

350 WILDCATS IN MICHIGAN

In Michigan probably 350 wildcats will be drilled, which is about the same as in 1951. No new areas of importance have been developed, except that at the present time there is more activity in the northern part of the state than there has been heretofore.

OTHER AREAS OF LESS IMPORTANCE

There are many other areas of less importance in the United States that will see development at about the same rate that took place in 1951, and, although it is contemplated that the number of wells will increase in 1952 over 1951, it is probable that the increase may be determined by the release of steel for Oilfield Equipment and Pipe.

The entire industry is suffering from Federal controls that hamper the free movements of price and materials which are so necessary in a dynamic industry. The removal of all controls and the return to the competitive free market would adjust many price inequalities at once.

There has not been a general increase in the price of crude oil since 1947, and costs have mounted during that period until the profit per barrel today is less than it was in 1947. The free market would quickly adjust this situation.

PROFIT IN TODAY'S PRICES

In spite of adversities, however, there still remains for a successful operator a profit in today's price for crude oil, but whether that profit is sufficient after taxes to take care of the expansion and future well being that is necessary in the industry is a question that only time will determine.

One thing certain, if we can judge the future by the past, is that the oil industry will continue an exploratory program sufficient to meet all needs if a proper Governmental climate is maintained and proper incentives exist.

* * *

Chairman Coltman: Thank you, Mr. Mattei.

At this point if it suits your mood and you have had a long day of sitting, perhaps you would like to stand up in your places and take a stretch. I think it would do us all good. *(Brief recess)*

Our next speaker is Mr. R. G. Follis, chairman of the board of the great Standard Oil Company of California. His company and his outstanding career are so well known as to require no introduction, in the West or the East, where he has courteously and impressively told us his company's story.

He is a graduate of Princeton. As most of you know, he was only 43 when he became president. He is a great oil man, a great refinery executive, a great contributor to the industry's research and to his company's research and development. He is an outstanding, over-all executive man, a man of fine taste. "The Standard Hour" symphony radio program is a reflection of his love of good music. Mr. Glenn Follis. *(Applause)*

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R. G. Follis: Mr. Coltman, ladies and gentlemen, I want to say that I am most happy to be taking a part in this first San Francisco meeting. I have had an opportunity to meet many of you around the country, and I assure you that, when I have talked about our affairs and problems, it has always been most stimulating.

CONFLICTING INFLUENCES ON FOREIGN INVESTMENT

In recent months, a great deal of attention has been centered on the foreign investments of American companies. I believe this stems from a number of apparently conflicting influences, both economic and political, which bear on the situation. We are influenced to concern about the future security of American investments abroad by constant threats of political and economic disturbance as well as unilateral action taken, without willingness to arbitrate, by individual governments. Conversely, I believe most of us see the fundamental soundness of the broad concept associated with the Point Four Program and the importance to our economic well-being of integrating and keying American business enterprise and industry operation to essential raw materials obtainable overseas.

It has occurred to me that as investment analysts you might be particularly interested in these factors and conflicting forces and how they bear on at least one American industry. I would like to give you our reaction to these forces. We have weighed all of them carefully in evaluating our foreign investment policy and have concluded that we are wise in carrying on with the expansion and development of foreign operations. The development of our reasoning and analysis will of necessity confine our considerations largely to oil, but I believe you will agree that this cannot help being comprehensive, since historically our industry has taken a major part in American investments abroad.

OIL LEADS AMERICAN INVESTMENTS ABROAD

American private enterprise today has foreign investments valued at almost $15 billion, with the oil industry accounting for about 30% of the total. This preponderance arises from a marked technical advantage which we enjoy over other countries as well as a corresponding relative underdevelopment of foreign oil source countries. The latter factor has provided a powerful economic incentive, due to the larger and more obvious structures still being available for discovery. Our industry's reaction to this has had a transforming effect on world oil flow.

THE CHANGE IN WORLD OIL FLOW

Since the end of World War II there has been a great change in world oil logistics. The United States and Venezuela were the most important prewar oil sources for the Eastern Hemisphere, particularly Europe. Now, as a result of the oil companies and their investments, the oil of the Middle East has been found and developed to supply almost three quarters of Eastern Hemisphere demand. Europe and the Middle East should soon become largely self-sufficient, and, with production in Indonesia being expanded, the entire Eastern Hemisphere can soon become self-sufficient in oil. This is important to the United States because it relieves the tremendous strain on our country at a time when its vital oil resources are required to supply its own demand. It is also important, because, although American oil will, in my opinion, be available for many years to come, a continuation of the prewar program of supplying both hemispheres from North America and northern South America could only result in the eventual pauperizing of this area with respect to oil. Even American industrial enterprise and ingenuity cannot hope to keep this country competitive with Europe and Asia once this vital raw material is no longer available to us domestically but remains in abundant supply in the Eastern Hemisphere.

A SHIFT IN REFINING LOCATIONS

With the development of local hemisphere sources of oil and the political and currency pressures urging the establishment of refineries at the point of consumption, the prewar practice of relying on very large refineries close to sources of crude oil is changing. This has required heavy investments and very careful planning to avoid creating surplus capacity in other existing plants. The progress that has already been made by American interests, particularly in Europe, is nevertheless impressive.

POSTWAR EUROPEAN REFINERY EXPANSION

Before World War II, Europe refined only 30% of the oil it consumed and at the end of the war had little remaining in the way of operable petroleum-refining facilities. Its continental plants had been priority targets. By makeshift repairs about 150,000 barrels a day of capacity were put in operation by early 1946. Without waiting for government assistance, the American, British, and Dutch companies began to rebuild and expand refining capacity. In the postwar period, through 1951, American companies spent almost a half a billion dollars to expand refining capacity in Western Europe. Of this capital outlay, only about an eighth was financed by the ECA program. Including the European companies, Western Europe is now processing over 80% of the 1,500,000 barrels a day of crude required to meet its petroleum product consumption.

BENEFITS TO WESTERN EUROPE

This spectacular expansion of refining capacity has given a great boost to the European economy. As importers of Middle East crude oils, instead of finished products, these countries are realizing substantial savings in foreign exchange. Consumption of oil has doubled since 1946, and slow recovery of coal production has accelerated a trend toward growing dependence on oil to fuel railroads, ships, and industrial plants.

MULTILATERAL TRADE DEVELOPS

The effect of construction of all this refining capacity in Europe and, to some extent, in Asia has been to create a great market for Middle East oil. This in turn has resulted in major expansion of crude oil supply. The investments involved and the Middle East governments' income from operations have given rise to the development of multilateral trade. The oil companies are paying royalties, taxes, wages, and for materials purchases in many types of currencies available through arrangements made with European and Middle Eastern authorities. As "middlemen" in this operation, the companies make it possible for consuming countries to pay for part of their oil needs by selling their goods to the companies, and, just as important, the countries where the crude oil is produced are buying materials and supplies with the foreign exchange they receive. These constructive arrangements also provide for converting into dollars for dividends the earnings that the American interests are not plowing back into the business.

BENEFITS TO THE MIDDLE EAST

These activities have had a profound effect on the countries of the Middle East. Because I am most familiar with Aramco, Tapline, and the Bahrein Petroleum Company, I would like to tell you something of the benefits being derived by the countries in which these companies operate.

Aramco now employs more than 16,000 Saudi Arabs. In addition, there are some 4,000 Saudi Arabs working for local contractors on Aramco construction projects. This payroll and Aramco's trade school and education programs have had a big impact on eastern Saudi Arabia. Surrounding towns have been modernized and have grown rapidly. There are a number of small repair shops and garages. Ancient methods of lifting water by donkey power have been replaced by the horsepower of Diesel-driven pumps. A middle class is springing up where there was none before. Aramco has also done a lot to improve general health and sanitation and has assisted in building roads and railroads and in starting agricultural projects.

For its part, the Saudi Arab Government has done a great deal for the country with its royalty and tax income from oil. A railroad has been constructed from a port on the Persian Gulf to Riyadh, the capital. Roads and airfields have been built, utility systems have been installed in several cities, and irrigation projects are yielding badly needed agricultural produce. The 50–50 sharing of profits which was put in effect in 1950 has greatly aided these programs. This equitable arrangement parallels those in Venezuela and has now been accepted as a pattern in other Middle Eastern countries. Oil operations in these countries have certainly enabled them to take rapid strides toward modernization of their economies and improvement of the social well-being of their peoples.

TRANS-ARABIAN PIPE LINE

An integral part of these operations is the 300,000-barrel-a-day Trans-Arabian pipe line which cost over $200 million to construct. Tapline's water wells have materially improved the lot of the Bedouin and his flocks. Its payroll of about 1,500 nationals and payment of transit fees are helping the economies of the Levant countries through which the line passes. Bahrein Petroleum Company, through its producing and substantial refining operations, is a great benefit to the people of Bahrein Island in the Persian Gulf.

AMERICAN POSITION IN THE MIDDLE EAST

Through these companies and share interests in Kuwait, Iraq, and Qatar, American companies have developed their largest foreign reserves. The American-controlled share in proven Middle East reserves is now around 25 billion barrels which, comparatively, is about three quarters of present known reserves in the United States. American share production is about 1,300,000 barrels a day, refinery runs nearly 400,000 barrels a day, and our gross investment in the area must now be over three quarters of a billion dollars.

OUR PROBLEMS IN THE EASTERN HEMISPHERE

Some of you gentlemen may already be well acquainted with the broad picture that I have just outlined, but it is a necessary backdrop to discussion of some of the problems we face, their effect on security of investment, and what we are doing about them. Probably the more important problems have to do with rising nationalism, currency exchange, and lack of understanding in some countries of the basic principles of economics.

NATIONALISM RISING

Certainly there is a wave of nationalism surging through Africa, the Middle East, Southern Asia, and the East Indies. National, religious, and racial pride are at stake. The more realistic leaders of these relatively young governments know they need the economic help and industrial skills of America and Western Europe, but they are determined not to be dominated politically or economically. I have talked with a number of the top government men of these countries and came away impressed by their sincerity and the recognition of their many problems. We must do all we can to prove to these people that we are not exploiting either producer or consumer and that the oil companies function as "middlemen." We are the link between undiscovered and undeveloped natural resources and the delivering of usable products to the consumer. We supply knowledge, skills, and capital to find oil, drill wells, build pipe lines, construct tankers and refineries, and install receiving and distribution facilities. Both the consumer and the owner of the underground reserves benefit. No better example of this "middleman" function can be given than the Iranian situation. Certainly there must be a growing realization on the part of responsible Iranians that ejecting the oil company which has the transportation and overseas refineries and marketing facilities has gotten them nowhere. Their crude oil is an idle asset. Though I hope that some equitable solution can be found for this problem, we should not give the Iranians the idea that we condone or overlook their illegal procedure.

CURRENCY PROBLEMS

Another situation that has given us cause for concern in this postwar period has been the growing necessity of either doing business in foreign currencies or losing market position. There were even threats of discrimination against American oil companies by some governments. These problems were resolved, however, when our companies agreed to use increasing proportions of foreign man power and materials in their operations. We may again move into critical periods, but, with the common interest of source country, middleman, and consumer as a lubricant, we should be able to maintain market position with mutually satisfactory and workable solutions.

COMPETITION ALWAYS A FORCE

In some of these countries there is a tendency toward immaturity in understanding international economics—an inclination to try to raise revenue without due regard for the producer or realistic knowledge of the forces of competition. Not only have we seen several cases where highly industrialized Europe or North America have turned to synthesis, substitution, or other sources when raw materials become too expensive, but the world supplies of petroleum are of such magnitude that no country can feel itself free from the forces of keen competition. A small increase in the cost of production in any country will be felt in shifting the balance of supply toward some other area. These are basic lessons which cannot be ignored in an equitable arrangement between private enterprise and government.

Actually, the profits in Saudi Arabia are no greater per barrel than on flush production in the United States. Productivity per well over there is abnormally high, but it is fortunate that it is because everything we build in Saudi Arabia costs more than twice what it would in the United States. If the wells were not so prolific, and if large-scale operation were not possible, it would probably have been uneconomic to develop production. These high costs, plus the necessity of investment for complete industrial, utility, and transportation facilities, as well as housing and community accommodations, on a barren desert, result in the Middle East countries realizing more income from their fields than the oil companies.

DECENTRALIZATION AND DIVERSIFICATION

At this point, however, I would like to mention the tendency that investors have to think of these operations as being entirely bound up in one country and, therefore, one political and economic risk. This is, in fact, far from the truth. In the case of most foreign oil operators, a major portion of investment and revenue is spread throughout the world in the form of distribution facilities, refineries, and market outlets at the grass root level, many of which have a long record of profitable operation built up on oil shipped from the Western Hemisphere before Eastern Hemisphere sources were developed. For example, the Caltex group of companies, in which we share a half interest with the Texas Company, although relatively new in the international field, has very large, widespread assets. Caltex has refineries in Europe and the Far East. It owns or operates a fleet of 79 tankers that move crude and products from sources of supply to markets throughout the Eastern Hemisphere. In addition, it now has 30,000-barrel-per-day production on Bahrein Island and is completing facilities within a few months that will permit production and shipment of 40,000 barrels per day of crude oil from central Sumatra. Caltex also holds a 20% interest in operations being carried on in New Guinea and is now inaugurating exploration work in western Australia. Further investments are being made in refining transportation, and marketing areas throughout the Eastern Hemisphere that will add further to diversification.

FOREIGN EARNINGS MORE STABLE THAN DOMESTIC

I believe that widespread foreign assets also lend stability to earnings. It seems to me that the chances of economic depression occurring simultaneously in all of the foreign countries are remote, and, furthermore, economic cycles in foreign countries are not apt to be so serious as they are in the United States. Some American companies with overseas interests proved the wisdom of diversification in the '30's when their foreign earnings held up much better than domestic profits.

A DYNAMIC FUTURE

The future of oil operations in the Eastern Hemisphere appears to be one of dynamic expansion. There is enough crude oil underground to assure supply for a vigorous expansion in the use of oil products. The important link between the raw material and the consumer is the capital and experience held by American and European oil companies. To complete the chain, we need only the continued reasonable attitude of governments toward private enterprise and the recognition of reasonable profits as a prime incentive.

STANDARD OF CALIFORNIA'S POSITION

After considering all the forces for and against foreign investment, our company concluded and continues to believe that we are acting in the best interests of our stockholders in maintaining and expanding the operations of our foreign affiliates and subsidiaries. This has been true in the past, and we who are responsible are firmly convinced that this policy will broaden and perpetuate the soundness of our company for the future.

RISKS NOT SO GREAT AS FEARED

I cannot believe that the risks of operating abroad are so great as some may fear. As long as we continue our policies of working with and sincerely trying to understand evolving foreign economic and political situations and aspirations, there should be no reason to expect discriminatory or confiscatory unilateral action.

AMERICAN INVESTMENTS ABROAD ARE VALUABLE ASSETS

American investments abroad are a valuable asset not only to the stockholder but also to the United States, the American people, and the rest of the free world. We are showing what our economic system and skills can do. We are assuring our continued access to strategic raw materials and at the same time winning and maintaining friends abroad by showing faith in their destinies. *(Applause)*

* * *

Chairman Coltman: Thank you.

Gentlemen, we have something next that, I think, easily can compete with a cocktail. Mr. Mattei was asking earlier if we were going to have a little session on "What Is an Analyst?" We are going to give you an analyst who is going to talk your language. As a matter of fact, the assignment has been given by Dick Lambourne to Gilbert Palmer, who is to provide a quick review of the high lights of the speeches and our own views on the present market, price of petroleum stocks, and their outlook in the future, all in ten minutes. That will be well handled by a man who from 1942 to 1946 did master sergeant weather forecasting service in India. He is the official weather forecaster for the Convention and has done a very good job so far. Mr. Palmer. *(Applause)*

* * *

Gilbert Palmer: Mr. Chairman, ladies and gentlemen, I feel that I have just had quite a lesson in analytical economics. Seriously, we have had some wonderful talks here this afternoon. This distinguished panel has covered several broad subjects. Any quick summary on my part is useless. I am not going to attempt that. After all, it has been a long day. We are running a little overtime. The next event is a cocktail hour, and so I will be brief.

OIL COMMON STOCKS

I would like to direct a few comments toward the oil common stocks, their position in the general market, and the outlook. One of the most pleasant subjects I can think of is a consideration of the oils' market action for the past few years. I don't have to tell you folks that the oils have been terrific! As measured by Standard and Poor's Indices, the oil average was at about 95% of the market in early 1946. Now the oil index is 170% of the market. During the six-year period the oil average gained 150% while the market gained about 40%. The oil's performance represents about the best of any industrial group, and their current prices are at all-time high levels, both in dollars and in relation to the rest of the market. Now, of course, the question is: Where do we go from here?

REASONS FOR PAST SUCCESS

Let us take a quick look at the reasons for the oils' past success. They made two fairly distinct moves against the market during this period, and for quite different reasons. In the first period from 1946 to 1948 the price of crude oil was going up, and the company earnings gained very sharply. In fact the earnings gain was *larger* than the market gain during these years and price-earnings ratios went down. Socony-Vacuum stock followed about an average pattern: It went from around 14 in early 1946 to about 21 in mid-1948, a gain of 50%, but the price-earnings ratio went down from about 7 times to 5 times as profits went from $1.87 a share to $3.13 and to $4.18. The second period, from 1948 to the present, saw little or no *net* earnings gain by the oils. Profits fell off rather sharply in 1949, and, though they have been on the upgrade ever since, 1951 results for integrated companies were just about the same as 1948 on a per-share basis. During the same period (that is, 1948 to 1951) earnings of the Dow-Jones average did better than the oils, gaining about 10%. In spite of this, investors displayed *continually increasing confidence* in the oils over these years, probably stemming from the fact that crude oil prices were maintained during the 1949 slump, contrary to widespread expectations. Price-earnings multiples of a typical group of integrated oils went from a mean of less than 5 times in 1948 to nearly 9 times currently, while the Dow-Jones industrials went from about 8 to 10 times earnings. Standard of Indiana is a good example of this period. Indiana earned $9.16 in 1948 and $9.71 in 1951. But the market price of Indiana has *doubled* since 1948, and the price-earnings multiple moved from 5 to 9.

CONTINUATION OF OIL'S STRENGTH

Starting at this point, at the present, can we see a continuation of the oils' strength in the market? To begin with, the odds favor little or no increase in oil company earnings this year or next. It would take a price increase to do it, and most industry economists are rather expecting lower prices for refined products, at least in selected areas. Then what about the chances for a further increase in the price-earnings ratio? If oil stocks have come from around 6 times earnings a couple of years ago to around 9 now, why not go up another 50% to 14 or 15 times? To get at the answer, I think we have to take some kind of a position on the intrinsic value of oil stocks and their earnings and dividend-paying ability. That is a big job, but I would like to touch on 3 factors in that appraisal: (1) probable growth for the oils, (2) how vulnerable they may be in a slower economy, and (3) how real the earnings are in relation to capital requirements.

NOT INHERENTLY RAPID GROWTH

In spite of the dynamic expansion of the industry during and after World War II and the huge amounts of capital required, I do *not* believe we should class the oil stocks as inherently rapid-growth situations. The demand curve for oil products in the United States shows a long-term growth of around 4 to 5% annually, and that is only modestly ahead of population growth. A good many economists think that growth will be slower over the next decade—perhaps around 3½%. The rate of growth compares with potential gains of as much as 10% a year for some companies and industries, based on past records and announced expansion plans. Many chemical companies fall into that category, and electronics companies for example. Further, many of these growth stocks unlike the oils are now in a position to get real benefit from elimination of the excess profits tax. Look at duPont as an example of such a stock. DuPont is priced at over 17 times current earnings, but at only about 12 times the same earnings under a 50% tax rate. Considering the rate of growth alone, I would say that duPont at 12 times earnings is a greater bargain than, say, Jersey Standard at 9 times earnings. Of course, the EPT is still very much with us and still absorbing a lot of duPont's earnings.

NOTHING CYCLICAL ABOUT DEMAND

There seems to be some reason to hope that oil earnings will be less cyclical than of old. After all, there has been nothing very cyclical about *demand* for oil products. The major cause for wide variations in earnings has been the wide price fluctuations of both crude and products. It now appears, however, that the Texas Railroad Commission has the price of crude under pretty firm control, and products should likewise tend toward some measure of stability. Price cutting will always be a factor, but the conditions that produce it may be more quickly corrected in the future. By that, I mean as quickly as or more quickly than in 1949.

If the oils go through another 1949 without seriously impairing earnings, I suspect *that* would have another uplifting effect on investor confidence.

HOW REAL ARE OIL COMPANY EARNINGS?

The question of how *real* are oil company earnings is a "toughie." It centers on the cost of finding crude oil—a highly complex and perhaps unsolvable problem. I would like to quote a few figures to define the problem and I am going to talk about a fictional crude oil company which is really an average of about a dozen actual crude operations in 1950. This figure includes some crude producers and the producing departments of some integrated companies. Bear with me on these. Gross income was $2.65 per barrel produced, operating costs 80 cents, and income taxes 20 cents. That left so-called "cash" earnings of $1.65. Charges for depreciation, depletion, and amortization totaled 75 cents a barrel, leaving net reported to the stockholder of 90 cents. The $64 question is, of course: Can you *replace* that barrel of oil for the 75 cents currently being provided through charges for "d and d"?

I think the answer may be "yes," at least as far as large, successful companies are concerned. Please note that this is not necessarily inconsistent with the replacement cost figure of $1 to $1.15 a barrel suggested by Mr. Mattei. The 75 cents is only that portion of costs that oil companies habitually capitalize. Another substantial portion is hidden in the "operating cost" item of 80 cents a barrel; the 80 cents includes geological and geophysical costs, a portion of dry hole costs, and other smaller items. Anyway, if my replacement cost figure is right, the 90 cents reported to stockholders *does* represent genuine earnings.

The cash flow angle has disturbing features, however. Out of the "cash" earnings of $1.65, our "average" company made capital expenditures of $1.30, leaving room for only 35 cents in dividends. Follow this arithmetic out just a little further. For the $1.30 spent, at a cost of 75 cents a barrel, our company will prove up 1.7 barrels of reserves. Take out the barrel produced during the year, and our company has increased its reserves 7/10 of a barrel. If we assume that the company had 15 barrels to start with, to support that barrel of production, the addition of 7/10 of a barrel represents an increase of only about 4½% to our reserve and in theory also to our productive capacity. At this point, gentlemen, I am stuck with that 35 cents dividend; we've got to spend the balance to keep pace with a modest rate of growth.

Also at this point I think I have reached a conclusion that may be unclear, but I will give it to you as one man's opinion. Growth of oil earnings is going to be slow, if we assume the present price for crude oil. Growth of dividends seems likely to be even slower. With yields now generally around 5% for many top-quality companies, I think the oils as a group have about run out of steam, and other groups will take over market leadership. If so, that is, if the *average* oil company has run out of steam, that puts real pressure on the analyst to pick much better-than-average oils—companies of real management strength with ability to show a good return on invested capital in all phases of the oil business. One more word, if you please. Good luck will continue to be an important asset of the oil analyst. It is still quite possible that any day now Amerada, or Honolulu Oil, or Superior Oil or whatever your favorite crude producer may be will find a 500-million-barrel pool of oil, and, if the finder has less than 500 million common shares outstanding, *something* might happen to the market! *(Applause)*

* * *

Chairman Coltman: Thank you, Mr. Palmer.

There is a motion and it has been seconded that we dispense with the question period. This is your meeting. All those in favor of dispensing with the question period signify by saying "aye." *(Ayes)* Those opposed will come to the front of the room for a few minutes. That is all. Thanks, ladies and gentlemen. *(Applause)*

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On May 22, 1952, dividend No. 255 of fifty cents (50¢) per share was declared by the Board of Directors out of past earnings, payable on July 1, 1952, to stockholders of record at the close of business June 10, 1952.

F. DUNNING
Executive Vice-President and Secretary
THE YALE & TOWNE MFG. CO.

RICHFIELD
dividend notice

The Board of Directors, at a meeting held July 10, 1952, declared a regular quarterly dividend of 75 cents per share on stock of this Corporation for the third quarter of the calendar year 1952, payable September 15, 1952, to stockholders of record as of the close of business August 15, 1952.

Cleve B. Bonner, *Secretary*

RICHFIELD
Oil Corporation

Executive Offices: 555 South Flower Street, Los Angeles 17, California

Richard W. Lambourne, President-elect, and Mrs. Lambourne, at the annual dinner

Photos by George Shimmon

Annual Dinner

MONDAY EVENING

MAY 5, 1952

Mrs. Pierre R. Bretey, wife of the retiring Federation President

PIERRE R. BRETEY, Baker, Weeks & Harden, New York, presiding.

Chairman Bretey: Gentlemen, with respect to the field trips, will those of you who are going down on the Richfield Oil trip to Cuyama please check out of your hotels Thursday and take your badges with you, and, when you arrive in Los Angeles, rooms will be in reservation for you at the Hotel Ambassador. Now, with regard to Thursday, all of you on the Special Train will have to check out of the hotels here by 3 P.M., and so will you please keep that in mind?

We would like to ask how many of you want to take the rail trip next Saturday in Los Angeles. You may contact Mr. Caird at the registration desk tomorrow. Now we shall hear from Bill Held.

William P. Held (President of the Security Analysts of San Francisco): We are running a little behind schedule tonight, and we would like the doors closed in a few moments. Will the waiters leave as soon as possible? We will appreciate it very much. Mr. Lambourne gave me a schedule which states that I am supposed to start talking at 8:15 P.M., and it is after that now.

On behalf of the Security Analysts of San Francisco, ladies and gentlemen, I wish to welcome you to our city. If you are as pleased to be here as we are to have you here, we of the San Francisco Society will consider that our portion of the Convention has been a very great success. To have over 700 people at this annual dinner is certainly most gratifying to all of us.

As you probably know, this is the first time in the history of our Federation that the National Convention has been held outside the city of New York. In addition, we would like to call your attention to the fact that it is the first time that we have had what you might call dual hosts for the Convention. We in San Francisco are sharing with our sister Society in Los Angeles the honor of having the delegates from throughout the United States here in California. This is also the first time a Federation Convention has extended over more than one day, and it has been co-ordinated with field trips throughout our area.

One of the things that pleases us in San Francisco most of all is that approximately 50 students from the graduate school of business at Stanford University, the University of San Francisco, the University of California, and other institutions of higher learning are represented here. We in the Society believe it is highly essential that young blood and new people be brought into our profession.

Another matter of great pleasure to us is the wide geographical diversification of territory from which the delegates come. We have delegates from Seattle in the Pacific Northwest and on across the country to Miami, Fla. We also have people who have come from Boston, the land of the cod, and people from as far west as San Diego in California, which we naturally consider the land of God. *(Applause)*

Before I proceed any further, I would like to present the President of the Los Angeles Society of Security Analysts, Mr. Walter Podolak, who will tell us something of the two days to be spent in Los Angeles, where I know you will receive as hearty a reception as you have received here in San Francisco. *(Applause)*

* * *

Walter Podolak (Los Angeles): A few minutes ago, a delegate sitting next to me asked if I was confused. I answered: "Yes." And I think that is entirely appropriate because most analysts are confused. The only difference is that the better ones are very confused. Anyway, I have a paper here that I very nicely prepared, as most of us do. I think you have had the same experience. You spend several days on it, perhaps a week before you know you are going to have to say something. It seems quite profound, and then, either half an hour before or two hours before, someone has just stolen the punch lines right from what you are going to say. So you start all over from scratch, you take two strokes for a penalty, and start out at the first tee. Anyway, it is my pleasure tonight to express advance greetings at this time, in the name of the Los Angeles Society. We certainly are very pleased to see so many of you from the East and other parts of the country here.

From the forums that have taken place today—I have sat in on most of them—I think the quality of the speakers and the subjects have certainly been all that any one could have desired, and I think a great deal of praise should be passed on to this San Francisco Society.

On the same line of tearing up this speech, I also found that, when you prepare something, someone says, "You have two minutes," and so I don't have very much time. I will say this: We have prepared a schedule down in Los Angeles which has been slightly changed because of unforeseen circumstances, and I will ask everyone of you to look at your envelopes that you received at the registration desk, and please note the changed time of departure of the field trips. It is different from the program which we sent out to you originally. We would also like all who have signed up for the special field trips in Los Angeles to stay on them, if you will, because it is pretty late at this stage to change them. We have spaces for those who would still like to join some of the field trips, and, if you will get in touch with Richard Link, he will take care of you.

I was interested particularly in what Mr. Funston said today at the luncheon. I think it gives us a great deal of food for thought in that there are several areas outside of our particular profession that need further perusal. We even have a situation developing here in which our profession could be quite definitely behind an action that eventually will bring into being a great increase in the number of stockholders in the country. If we increase our stockholder participation in this country I think we will forever and a day do away with that concern that we have felt in recent years about our free enterprise system. I think this is the year when such expressions are quite appropriate in meetings of this kind.

We hope to see you all down in Los Angeles at the end of this week. Thank you. *(Applause)*

* * *

Mr. Held: Thank you very much, Walter. I am sure many of you will be there.

I have two messages to read at this time. One is from the office of the mayor of San Francisco, the Honorable Elmer E. Robinson. Mayor Robinson could not be with us because he has been ill. *(Reading):*

Dear Mr. Lambourne: As you know, my schedule has been somewhat curtailed temporarily by my doctor. Consequently, it is with reluctance that I greet the Fifth Annual Convention of the National Federation of Financial Analysts Societies by this proxy rather than in person. I can assure you, however, that the greetings are none the less sincere. It is always a pleasure for San Francisco which, of course, is the financial center of the West [I pause here—in respect to our sister City of the Angels—it must be remembered that the mayor is elected by the citizens of the city of San Francisco and, therefore, has to be a little bit biased in the subject of where the financial center of the West is located.] I express not only the pride of our city in being so honored but also the hope that our guests and visitors will completely enjoy every minute of their stay in San Francisco. With very best wishes, I remain, Elmer E. Robinson, Mayor. *(Applause)*

I have another letter from the Honorable Earl Warren, governor of the state of California.

Dear Mr. Lambourne: It was thoughtful of you to invite me to attend the Convention of the National Federation of Financial Analysts Societies on May 5. I wish I could attend, but my schedule on that day makes it impossible for me to include another engagement. Will you welcome the delegation to the Convention on my behalf and extend my best wishes for a pleasant visit to our state. Sincerely, Governor Earl Warren. *(Applause)*

I know our Governor is referring to delegates and conventions, but whether his mind is on this Convention or whether it might be one that is coming in the future, I don't know. *(Laughter)*

Now, passing on to the introductions of the evening, again, in the interests of conserving time, I am going to read the names of the various guests at the head table. I will ask them to rise and then be seated. Will you please withhold your applause until all of the guests have arisen? In that way, we will save a little time. Introducing, first, Mr. H. F. Langenberg, member of the St. Louis Society of Financial Analysts. Mr. W. S. Bush, vice-president of Montreal Institute of Investment Analysts. Mr. W. C. Norby, Investment Analysts Club of Chicago. Mr. Herbert C. Wells, President of the Providence Society of Financial Analysts. Mr. John G. Eidell, our own vice-president. Mr. George M. Hansen, President of the Boston Security Analysts Society, and past President of the Federation; Mr. Jeremy C. Jenks, President of the New York Society of Security Analysts; Mr. Ken Woodworth of Boston, who was again elected last night to the position of secretary-treasurer of the Federation, and was Federation President in the years 1947 and 1948. Having been a secretary-treasurer, I think the man must be a hog for punishment. Mr. Pierre R. Bretey, President of the Federation, and Editor of THE ANALYSTS JOURNAL. Mr. Richard W. Lambourne, who, last night, was elected the President of the Federation, and is past President of our own Society. *(Applause)*

I might pause to say here that some of us who have been participating in the preparation of this Convention thought this should be the Lambourne Memorial Convention. After working with Dick on this thing for the last year, I can understand how a galley slave must feel when they crack the whip and beat out the time. However, it was lots of fun.

Mr. Samuel B. Jones of Philadelphia who last night was elected executive vice-president of the Federation—and I might also announce at this time that the next National Convention will be held in Philadelphia on April 15 and 16 of next year; so put in your reservations early.

Mr. Walter Podolak of the Los Angeles Society. I missed Mr. Lucien O. Hooper, President of the National Federation in 1949. Mr. William C. Trapnell, 1951 President of the Financial Analysts of Philadelphia. Mr. George W. Blauvelt, President of the Cleveland Society of Security Analysts. Mr. James C. Wheat, vice-president of the Richmond Society. T. Norris Hitchman, President of the Detroit Society. Last but not least, Richard Link, the Los Angeles field trips chairman. *(Applause)*

I have names of just a few of the guests that we are very pleased to have with us tonight. As I said before, if you will reserve your applause until I give you the sign, I will appreciate it. Mr. G. Keith Funston, president of the New York Stock Exchange, Mr. Ronald Kaehler, president of our own San Francisco Exchange, Mr. W. G. Paul, president of the Los Angeles Exchange, Rear Admiral Bertram Rogers, commanding officer of the 12th Naval District. Admiral George Murray of the Western Sea Frontier. Lieutenant General Joseph Swing, commander of the Sixth Army. *(Applause)* We are very glad to have you gentlemen present. I happen to be one of your admirers.

Now, without any further ado, I will turn the meeting over to Kennard Woodworth, secretary-treasurer of the National Federation. *(Applause)*

Kennard Woodworth: Ladies and gentlemen, people always seem to like to have me make a talk as they know it is going to be very brief. *(Applause)*

Mr. Chairman, ladies and gentlemen, and Mr. Retiring President of the National Federation: I would like to talk particularly to you about an outstanding analyst of many many years experience, a recognized expert in the railroad field, a teacher-lecturer and author, former President of the New York Society, editor and moving spirit for years in THE ANALYSTS JOURNAL, devoted to the cause of analysts Societies. He has given faithfully and well of his time and energy to the National Federation as one of the original founding fathers, later as secretary-treasurer and, this year as President, climaxing his official tour of duty with this outstanding Convention and unique railroad tour.

It is now my privilege, representing all of the Societies in the National Federation, and on behalf of analysts everywhere, to present you, Pierre R. Bretey, with this silver plaque, with evidence of our regard for you and a job well done. Hang it in your office for all to see. We all love you, Pierre. *(Applause)*

* * *

Mr. Bretey: Thank you, Ken. Mr. Chairman, Mr. President, ladies and gentlemen, it is usually customary for your retiring President to discuss some of our mutual problems. In focusing these questions, may we provide you with some historical material as a background for peering into the dim haze of the future.

It seems but yesterday that a small group, regularly meeting to discuss economic fundamentals and market trends, decided on the formation of an analysts Society. This group felt that only through such an association could the analyst attain his proper niche in the financial world. For, before that time, as properly pointed out by its then President, Kennard Woodworth, at our first Federation dinner, the analyst was merely a statistician with a professional rating, earning the financial reward of a third class librarian—in other words, the custodian of *Moody's Manuals.*

From a nucleus of less than fifty analysts, the New York Society has grown into a strong, well-knit organization of about 1,700 members. Other than during the summer months, we have four luncheon meetings weekly, addressed for the most part by leading corporate officials. The Society also publishes what has become an outstanding financial and economic journal.

Such praiseworthy activity has not been limited to the confines of New York City. Reflecting a similar vitality, Societies of analysts located in other cities developed rapidly.

Before the young stripling grew to manhood, one further measure toward his maturity seemed necessary. Happily that step was taken, for in May 1947 a group representing several eastern Societies assembled in New York to discuss the desirability of setting up a national organization. The meeting was sparked by Kennard Woodworth, later to become that organization's first President. From the efforts of this group emerged the National Federation of Financial Analysts.

The growth of the Federation has been phenomenal. Beginning with a membership of four Societies (Boston, Chicago, Philadelphia, and New York) within a year it added Los Angeles, and within two years San Francisco. Gradually we expanded still further so that as of this moment our constituent Societies number twelve, namely:

Boston Security Analysts Society
Investment Analysts Society of Chicago
Cleveland Society of Security Analysts
Analysts Club of Detroit
Los Angeles Society of Security Analysts
Montreal Institute of Investment Analysts
New York Society of Security Analysts, Inc.
Financial Analysts of Philadelphia
Providence Society of Financial Analysts
Richmond Society of Security Analysts
St. Louis Society of Financial Analysts
The Security Analysts of San Francisco

We are especially pleased to have the newest Society in the Federation so well represented here at this Convention—the fine Richmond Society admitted in 1951.

In due course our membership should continue to increase and include existing Societies in smaller cities which are not as yet members of our National Federation. We invite them to join us in our common cause. That they will all accept this invitation is our fondest hope. Speaking for all analysts in our twelve constituent Societies, we would like to see a properly accredited Society of security analysts in every city of the United States, each playing its part in furthering the end not only of improving standards and methods of analytical techniques but also of improving the economic and professional status of the analyst as well. We are gradually approaching that goal.

Slowly, but nonetheless surely, the financial community has begun to recognize the importance of the analyst. The extraordinary co-operation we have obtained from industrial officials on our special train proves this point. We would indeed be ungrateful were we not to acknowledge our debt of gratitude to those industrial leaders who have made possible what is admittedly the greatest mass industrial plant inspection trip ever organized in this country. We also wish to thank all of those railroad officials who have given so much time and effort to insure the success of our trip.

The C.B.&Q., the D.&R.G. and the Western Pacific officials outdid themselves in trying to make our ride a remarkable one, and, indicative of an act beyond the call of duty, so to speak, Judge McCarthy authorized an expenditure of $1,580 to reroute our train over the U.P. when otherwise, owing to floods and rockslides, we could not have met our schedules in Salt Lake.

Another evidence of recognition by the financial community of the importance of the analyst is his inclusion, for the first time, as a judge in the Annual Award Contest sponsored by the *Financial World*. As you doubtless all know, some 5,000 annual reports are screened, and, not only are awards given to companies having the best annual reports in their respective fields, but also a Gold Oscar is given to the company judged to have the best annual report of all those submitted.

In the 1951 contest some twenty analysts were asked to appraise reports for final selection by the judges. Your President was one of the five judges in the contest. We have reason to believe in succeeding years the President of your organization will continue to act as a Judge, and senior analysts, specialists in their fields, will be asked to continue the policy of screening reports to assist the judges in their choice of the best annual reports submitted.

Several months ago your President was invited to become a member of the policy committee of the Institute of Fiscal & Political Education, a nonprofit organization whose board of trustees and policy committee include prominent educators and numerous financial and economic specialists. It is to be hoped that our organization will continue to work closely with the Institute, whose aims closely parallel ours, and to that end I recommend that your incoming President follow our footsteps and become a member of that organization's policy committee during his term of office.

PROFESSIONAL STANDING FOR QUALIFIED ANALYSTS

For years the New York Society of Security Analysts has been considering the desirability of giving increased professional standing to qualified security analysts and to raise requirements for those about to enter our profession. Many of us have thought that the security analyst should be educationally fit to qualify for a degree comparable to that of CPA for the accountant, LLB for the attorney, M.D. for the physician, and so on. Its name, whether Qualified Security Analyst, or Chartered Security Analyst, is relatively unimportant. What is important, however, is that our thinking be focused on the worth of this title.

Hence we think the standards committee of the New York Society took a forward step in recommending to its executive committee that a program be adopted whereby the use of the title Chartered Security Analyst be permitted to those analysts who have met certain requirements. Details of the plan are being discussed and doubtless will be modified through experience. Undoubtedly many of our sister Societies will want to follow in our footsteps.

The standards committee of the New York Society also recommended formation of a board of examiners, who, after January 1, 1955, would have the responsibility of grading papers and determining the eligibility of the analyst to obtain this degree. To finance the estimated cost of the program a modest fee has been suggested.

Obviously, the average senior analyst has little to gain from such a program. He is already well established. But for the college graduate of today who will, all too soon, step into our shoes, this is a most constructive step. Surely we all wish to improve the standards of our profession, and only by attracting the highest caliber of college-trained men can we attain the status that has been the goal of all who have given of our time in the direction of either individual Societies or the Federation itself. So may I give this movement my blessing, and I trust that not only will the New York Society adopt this program, but also that in due course all of our constituent Societies will follow what appears to be a wise and progressive step.

ANALYSTS JOURNAL MY DEEPEST INTEREST

As you know, THE ANALYSTS JOURNAL has been my deepest interest for the past eight years. Its founders scarcely envisioned its rapid growth. Today with a circulation approaching 4,000 we are optimistic that its growth will be annually compounded.

Those of us closely associated with the JOURNAL believe it is a major link connecting the constituent Societies of the Federation, a vital factor in co-ordinating the interests of all. Yet much still remains to be done. We would like to have abstracts of important talks delivered at all regional meetings. We would also like to urge greater participation in JOURNAL affairs. We want articles from the West Coast, from the South, and from the Middle West. We ask your co-operation.

To the extent that the JOURNAL can be improved by reason of greater revenues, many of you can assist, particularly those of you with important corporate contacts. We believe our columns provide a unique opportunity for corporations to communicate with the analyst. We, therefore, urge your co-operation, and, if you can be of help to us, please contact Truslow Hyde, our advertising manager, or our advertising solicitor, Grant Webb.

May I pay tribute to several of my associates on the JOURNAL—Messrs. John Stevenson, Albert Squier, and Truslow Hyde, who have given freely of their time to undertake the arduous tasks as business manager, circulation manager, and advertising manager, respectively. Without their help our JOURNAL could not have made noteworthy progress.

Special mention should be made of Helen Slade. *(Applause)* It is particularly fitting to speak of her in this city, for doubtless few of you know she is a native San Franciscan, who violated Horace Greeley's precept to "Go West," and instead has come East to grace New York City's skyline.

Few of you realize the gigantic task involved in preparing material for the JOURNAL. Whatever measure of success our magazine has achieved is primarily due to her efforts. Whenever we need a "name" article, Helen gets it for us. She truly gives of herself without stint or favor for the JOURNAL. So we can repeat what we have already stated: "No Helen, no JOURNAL." Thank you, Helen, on behalf of all analysts.

In terminating my remarks, may I acknowledge a debt of gratitude to those who have co-operated with me to make possible what I hope has been an eventful year, and may I also acknowledge a similar debt to those who have made this Fifth Annual Convention such an outstanding success. One should particularly single out that handful of valiant workers in San Francisco and Los Angeles, mentioned previously, as well as those committee chairmen shown on your programs.

And now it is my privilege to tell you that at a meeting of your Federation's directors last night, Samuel B. Jones of the Financial Analysts of Philadelphia was elected executive vice-president. Sam is eminently qualified for this office, having been active in his own Society and served as its President in 1950. Sam is also vice-president of the Fire Association of Philadelphia.

As President for the 1952-53 fiscal year, I am pleased to announce the election of Richard W. Lambourne. Your new President needs no introduction on my part. A native of Salt Lake, he, unlike Helen Slade, followed Horace Greely's precept and settled both in San Francisco and in adjacent Palo Alto. He has carried the burdens of organizing many of the details of this Convention, the success of which can be largely attributed to him. He has been a tireless worker in your own local organization, furnishing it with inspired leadership in 1950. Traveling extensively throughout the country, he is probably the best known of all San Francisco's analysts, in fact, one may add, one of the best-known analysts throughout the entire country. I can think of no individual more fitted to the leadership of the Federation's affairs for the succeeding year than your incoming President, Dick Lambourne. So, in turning over the gavel to you, Dick, I am sure I speak for all present in wishing you every good luck and a most successful administration. *(Standing Applause)*

* * *

Richard W. Lambourne: Thank you very much. I know that I could not possibly fill Pierre's shoes in quite a number of ways. And I feel that an incoming President should be seen but not heard. *(Applause)*

However, Mr. President and ladies and gentlemen, I do have one very pleasant chore tonight. It is not even a chore, as it is an honor. As most of you know, we have in California an organization known as the Native Sons and Daughters of the Golden West. The National Federation has a member from New York City who fully qualifies as one of California's native daughters. We are happy she has come out here to enjoy once again the scenes of her first home and to renew her many friendships in San Francisco. All of us feel that without her strong support from the very beginning in ways too numerous to mention, this Convention in San Francisco and in Los Angeles would not have been possible. She has given us great aid and encouragement, and we are most grateful. Moreover, she has carried the burden of the first four National Conventions of the Federation, handling all the registrations and other responsibilities without recompense of any sort, involving uncountable hours of hard work, plus the many years of effort as managing editor of THE ANALYSTS JOURNAL in making it a fine professional publication.

The National Federation owes a great deal to Helen Slade and likewise to her able husband, Henry Sanders, who has helped her in so many respects. It is my great privilege, as general chairman of this Convention, and on behalf of the National Federation, the Security Analysts of San Francisco, and the Los Angeles Society of Security Analysts, to present this jeweled pin to Helen Slade as a measure of our great appreciation for her valuable services to the Federation, to this Convention, and to the entire security analysts' profession.

Helen, would you come up here to receive this token of appreciation. *(Applause)*

(Mr. Lambourne thereupon made the award to Mrs. Helen Slade Sanders, who received it with an expression of her sincere thanks.)

Mr. Lambourne: I will now turn the meeting back to Pierre Bretey, who will introduce our speakers.

Chairman Bretey: Since we are running behind our schedule, I will make my introductions rather brief. Our next speaker is a brilliant analyst, an author, and he has long been devoted to many of the standards of our profession. It gives me great pleasure to introduce to our West Coast friends one of our truly outstanding analysts in the East, Mr. Benjamin Graham. *(Applause)*

* * *

Benjamin Graham: Messrs. Chairmen, members, ladies and gentlemen, the National Federation has conferred a signal honor upon me in assigning me this prominent place at the Annual Convention. In return, I should launch immediately into my sober and serious subject. However, I am afraid that neither you nor I are feeling very serious and sober at the moment. This western hospitality has become overwhelming. At the Dean Witter cocktail party I heard one of the ladies say to her husband, "Tom, don't you dare take another drink. Your face is beginning to blur already." *(Laughter)* But, as for me, I am in the position of the security analyst who boarded that Special Train in Chicago, carrying a Bible, and his friend said to him, "Jim, what are you doing with a Bible?" He said, "Well, our schedule calls for us to stop Saturday, May 15, at New Orleans. I have heard a lot about that city—the shows, women, liquor, and the gambling—it is going to be wonderful." His friend said: "What are you going to do with the Bible?" He replied, "If it is as good as they say it is, I may stay over Sunday." *(Laughter)*

Now, figuratively speaking, you all are staying over Sunday, for I am launching into my sermon, "Toward a Science of Security Analysis."

With this week's elaborate and enthusiastic proceedings one is tempted to say that security analysts and security analysis have finally come of age and are entering upon their full patrimony of dignity and power. But it is not my present purpose to compliment the Societies on their progress—impressive as it has been—but rather to summon you to deeper efforts and wider accomplishments. Since college days, I have carried as my favorite motto the words that Goethe put in the mouth of Orestes:

> The little done soon vanishes from the gaze that looks ahead and sees how much remains to do.

My topic was chosen nearly a year ago, but it happens to coincide neatly with the theme of the last issue of THE ANALYSTS JOURNAL, which was devoted to "The Effect of Science on Securities." There the emphasis was placed on what science is accomplishing for the various industries in which we invest. Our theme tonight seeks to carry the scientific concept into the processes and conclusions of security analysis itself. None of you, I am sure, expects me to expound a full-blown, completely articulated "science of security analysis." No—as my modest title suggests, you must be satisfied with a rapid survey of the field, with the raising of a number of questions which are left for the future and for yourselves to answer and perhaps with a few constructive ideas that may assist my fellow workers in our fascinating vineyard. My apologies in advance for the absence of humor in this talk. In this field it seems impossible to be entertaining and reasonably scientific at the same time.

THE SCIENTIFIC METHOD

As H. D. Wolfe pointed out in his paper in the last JOURNAL (Science as a Trustworthy Tool), scientific method includes among its factors the wide observation and recording of events, the construction of rational and plausible theories or formulas, and their validation through the medium of reasonably dependable predictions. There are many varieties of scientific or quasiscientific disciplines, and the character of the predictions based on them will vary greatly from one to another.

At one extreme take this microphone. An electrical engineer, having rigged it up carefully, can predict that a word spoken into it will be immediately amplified. The prediction is precise; the verification prompt and unquestionable. At the other extreme let us take psychoanalysis—a discipline sometimes compared with our own security analysis. Here prediction and verification are less definite. A layman who finances psychoanalytical treatment for one of his family is apt to be slightly in the dark about such details as the nature of the illness, the method and duration of the treatment, and the extent of the cure, if any. About the only thing he can predict with certainty is how much it will cost per hour. Between these two extremes lies actuarial science, which to my mind is more relevant than the others to the scientific possibilities of security analysis. The life insurance actuary makes predictions concerning mortality rates, the rate of earnings on invested reserves, and factors of expense and profit—in all instances based largely on carefully analyzed past experience, with allowance for trends and new factors. Out of these predictions, with the aid of mathematical techniques, he fashions suitable premium schedules for various types of insurance. What is most important for us about his work and his conclusions is that he deals not with individual cases but with the probable *aggregate result* of a large number of similar cases. Diversification is of the essence in actuarial science.

Thus our first practical question about "scientific security analysis" is whether it is actuarial in character, and has diversification as its essential ingredient. One plausible answer may be that diversification is essential for certain types and objectives of security analysis but not for others. Let us classify the things that security analysis tries to do and see how the element of diversification applies to each. At the same time we may raise other questions concerning the scientific methods and predictions operating in each of the classes.

I suggest that the end product of our work falls into four different categories, as follows:

1. The selection of safe securities, of the bond type.
2. The selection of undervalued securities.
3. The selection of growth securities, that is, common stocks that are expected to increase their earning power at considerably better than the average rate.
4. The selection of "near-term opportunities," that is, common stocks that have better-than-average prospects of price advance, within say the next 12 months.

This list does not include stock market analysis and predictions based thereon. Let me comment briefly on this point. If security analysis is to be scientific, it will have to be so in its own right and not by depending on market techniques. It is easy to dismiss this point completely by saying that, if market analysis is good, it doesn't need security analysis; and, if it isn't good, security analysis doesn't want *it.* But this may be too cavalier an attitude toward an area of activity that engages the interest of a host of reputable security analysts. That stock market analysis and security analysis combined may be able to do a *better* job than security analysis by itself is at least a conceivable proposition and perhaps a plausible one. But the burden is on those who would establish this thesis to demonstrate it to the rest of us in unequivocal and convincing fashion. Certainly the published record is far too meager, as yet, to warrant conceding a scientific standing to a combination of the two analyses.

FOUR CATEGORIES

To return to our four categories of security analysis. Choosing safe bonds and preferred stocks is certainly the most respectable if not the most exciting occupation of our guild. Not only has it major importance of its own, but also it can offer useful analogies and insights for other branches of our work. The emphasis of bond analysis is on past performance, tempered by a conservative view of future changes and dangers. Its chief reliance is on a margin of safety that grows out of a small ratio of debt to total real value of the enterprise. It requires broad diversification to assure a representative or average over-all result. These viewpoints have made bond investment, as practiced by our financial institutions, a soundly scientific procedure. In fact, bond investment now appears to be almost a branch of actuarial science. There are interesting similarities (as well as differences) between insuring a man's life for $1,000 against a premium of $34 per year, and lending $1,000 on a long-term bond also paying $35 per year. The calculated mortality rate for men aged 35 is about 4 out of a 1,000, or 4/10% per year. A comparable "mortality rate" might be applied to corporate enterprises in the best financial and operating health, to estimate the risk attaching to high-grade bond investment. Such a figure, say 1/2%, might then properly measure the risk and yield differential between the strongest corporate bonds and U. S. Government obligations.

BOND INVESTMENT A SCIENTIFIC PROCEDURE

Bond investment should take on more of the character of a scientific procedure when the monumental corporate bond study, carried on by the National Bureau of Economic Research and other agencies, is finally completed and the mass of statistical data and findings is made available to security analysts. The greatest weakness of our profession, I have long believed, is our failure to provide really comprehensive records of the results of investments initiated or carried on by us under various principles and techniques. We have asked for unlimited statistics from others covering the results of their operations, but we have been more than backward in compiling fair and adequate statistics relating to the results of our own work. I shall have a suggestion to make on that point a little later.

SELECTION OF UNDERVALUED SECURITIES

The selection of undervalued securities appears next on my list because of its logical relationship to investment in safe bonds or preferred stocks. The margin-of-safety concept is the dominant one in both groups. A common stock is undervalued, typically, if the analyst can soundly establish that the enterprise as a whole is worth well above the market price of all its securities. There is a close analogy here with bond selection, which also requires an enterprise value well in excess of the debt. But the rewards for establishing that a common stock is undervalued are, of course, incomparably greater; for in the average case all or a good part of the margin of safety should eventually be realized as a profit to the buyer of a truly undervalued issue.

In this connection I want to throw out a broad and challenging idea—that from a scientific standpoint common stocks *as a whole* may be regarded as an essentially undervalued *security form.* This point grows out of the basic difference between individual risk and over-all or group risk. People insist on a substantially higher dividend return and a still larger excess in earnings yield for common stocks than for bonds, because the risk of loss in the average *single* common stock issue is undoubtedly greater than in the average *single* bond. But the comparison has not been true historically of a *diversified group* of common stocks, since common stocks as a whole have had a well-defined upward bias or long-term upward movement. This in turn is readily explicable in terms of the country's growth, plus the steady reinvestment of undistributed profits, plus the strong net inflationary trend since the turn of the century.

FIRE AND CASUALTY RATES

The analogy here is with fire and casualty insurance rates. People pay about twice as much for fire insurance as their own actuarially determined exposure would indicate—because they cannot soundly afford to carry the individual risk themselves. For similar reasons the over-all return on common stocks appears to have been at least twice as much as their true over-all risk has required. An interesting relationship at this point appears from the Keystone chart showing the trend of the Dow-Jones industrial average since 1899. Both the upper and lower lines happen to rise at the rate of one third every ten years. You will recognize this as the 2.90% rate of compound interest realized on U. S. Savings Bonds, Series E. What this means is the consistent Dow-Jones investor has obtained the same increase in *principal value* as the savings bonds offer in lieu of interest; and in addition the Dow-Jones stock investor has obtained all the annual dividends from his holdings as a bonus above the Government bond interest rate.

The reasoning I have just indulged in is, I believe, both scientifically valid and psychologically dangerous. Its validity depends on the maintainance in the stock market of the substantial disparity between bond yields and the price-earnings ratios on stocks. If—as happened in the 1920's—this very thesis is twisted into the slogan that common stocks are attractive investments, regardless of how high they sell, then we would find ourselves beginning as scientists and ending as heedless and ill-starred gamblers. It may be a fair generalization to assert that the top levels of most "normal" bull markets are characterized by a tendency to equate stock risks with bond risks. These high valuation may indeed have some justification in pure theory, but the important thing for us to bear in mind as practicing analysts is that, when you pay full value for common stocks, you are in great danger of later appearing to have paid too much.

INDIVIDUAL UNDERVALUATIONS

Turning now to the field of *individual* undervaluations, we find ourselves on more familiar ground. Our work with this group readily admits of the scientific processes of wide observation and the testing out of predictions or hypotheses by their sequels. The theory of undervalued issues must necessarily require an explanation of their origin. The explanations are in truth quite varied and taken together form what may be called a "pathology of market prices." They range from obvious causes, such as an unduly low dividend or a temporary setback in earnings, to more subtle and special conditions such as too much common stock in the capital structure or even too much cash in the bank. In between lie numerous other causes such as the presence of important litigation, or the combination of two dissimilar businesses, or the use of the now discredited holding company setup.

ORIGINS OF UNDERVALUATION UNDERSTOOD

The origins of undervaluation are pretty well understood by now and could no doubt be set forth in an acceptably scientific study. We do not know as much about the cure of undervaluations. In what proportion of cases is the discrepancy corrected? How or why does the correction occur? How long does the process take? These questions remind us somewhat of those we raised about psychoanalysis at the outset. But one thing of importance we do know, and that is that the purchase of undervalued issues on a diversified basis does produce consistently profitable results. Thus we have a worth-while field for more scientific cultivation. Here inductive studies carried on intelligently and systematically over a period of years are almost certain to be rewarding.

SELECTION OF GROWTH STOCKS

The third objective of security analysis is the selection of growth stocks. How scientific a procedure is this now, and how scientific can it be made to be? Here I enter difficult waters. Most growth companies are themselves tied in closely with technological progress; by choosing their shares the security analyst latches on, as it were, to the coattails of science. In the 40 or more plant inspections that are on your scheduled field trips for this Convention week, no doubt your chief emphasis will be placed on new products and new process developments; and these in turn will strongly influence your conclusions about the long-pull prospects of the various companies. But in most instances this is primarily a *qualitative* approach. Can your work in this field be truly scientific unless it is solidly based on dependable *measurements,* that is, specific or minimum projections of future earnings, and a capitalization of such projected profits at a rate or multiplier that can be called reasonably conservative in the light of past experience? Can a definite *price* be put on future growth—below which the stock is a sound purchase, above which it is dear, or in any event speculative? What is the risk that the expected growth will fail to materialize? What is the risk of an important downward change in the market's evaluation of favorable prospects? A great deal of systematic study in this field is necessary before dependable answers to such questions will be forthcoming.

STOCK INVESTMENT IN PRESCIENTIFIC STAGE

In the meantime I cannot help but feel that growth stock investment is still in the prescientific stage. It is at the same time more fascinating and less precise than the selection of safe bonds or undervalued securities. In the growth stock field, the concept of margin of safety loses the clarity and the primacy it enjoys in those other two classes of security analysis. True, there is safety in growth, and some of us will go so far as to declare that there can be no real safety except in growth. But these sound to me more like slogans than scientifically formulated and verified propositions. Again, in the growth field the element of selectivity is so prominent as to place diversification in a secondary and perhaps dubious position. A case can be made for putting all your growth eggs in the one best or a relatively few best baskets. Thus in this branch of security analysis the actuarial element may be missing, and that circumstance undoubtedly militates against truly scientific procedures and results.

INVERTED RELATIONSHIP

There is undoubtedly an organic but inverted relationship between the growth stock concept and the theory of undervalued securities. The attraction of growth is like a tidal pull which causes high tides in one area, the assumed growth companies, and low tides in another area, the assumed nongrowth companies. We can measure, in a sense, scientifically the distorting effect of this influence by using as our standard the *minimum business value* of enterprises in the nonfavored group. By way of illustration let us apply that thought to three California concerns. The shares of Roos Brothers, a local retail enterprise, will in the nature of things tend to sell below their analytically determined value for basically the same reasons that are bound to produce overvaluations in the shares of Superior Oil or Kern County Land.

I come finally to the standard occupation of brokerage house analysts and advisory services, namley, the selection of issues favorably situated for a near-term market advance. The usual assumption here is that, if the earnings will improve or the dividend will be raised, then the price will improve. Thus the process consists essentially of locating and recommending those companies that are likely to increase their earnings or dividends in the near term. You all know the three basic hazards encountered in this work: that the expected improvement will not take place, that it is already discounted in the current price, that for some other reason or for no known reason the price will not move the way it should.

It may be that despite these hazards it is possible to obtain worth-while results on the average from competent short-term analyses and predictions. Who of us can say whether or not this is true? In view of the importance of this analytical work, in terms of time, energy, and money cost, it might not be a bad idea to subject it to a thoroughgoing evaluation.

SEARCHING SELF-EXAMINATION

This brings me to my conclusion and my one concrete proposal. Security analysis has now reached the stage where it is ready for a continuous and searching self-examination by the use of established statistical tools. We should collect the studies and recommendations of numerous analysts, classify them in accordance with their objectives (perhaps in the four groups suggested in this paper), and then do our best to evaluate their accuracy and success. The purpose of such a record would not be to show who is a good security analyst and who is a poor one, but rather to show what methods and approaches are sound and fruitful and which ones fail to meet the test of experience.

This suggestion was originally made in the articles published under the pseudonym of *Cogitator* in THE ANALYSTS JOURNAL six years ago. At that time I wrote: "It is unlikely that security analysis could develop professional stature in the absence of reasonably definite and plausible tests of the soundness of individual and group recommendations." The New York Society is now taking the first positive steps to establish a quasiprofessional rating or title for security analysts who meet specified requirements. It is virtually certain that this movement will develop ultimately in full-fledged professional status for our calling. The time may well be ripe for the Federation and its constituent Societies to begin a systematic accumulation of case histories, which should make possible the transmission of a continuous, ever-growing body of knowledge and technique from the analysts of the past to those of the future.

When this work is well under way security analysis may begin—modestly, but hopefully—to refer to itself as a scientific discipline. *(Applause)*

* * *

Chairman Bretey: Thank you very much, Ben.

Our next speaker is a former chairman of the Board of Governors of the Federal Reserve System. He is presently chairman of the First Security Corporation, located in Salt Lake City; one of our more brilliant economists; and certainly one of our more brilliant officials, even though somewhat controversial. It gives me great pleasure at this time to introduce Mr. Marriner S. Eccles. *(Standing Applause)*

* * *

Marriner S. Eccles: Mr. Chairman, ladies and members of this august body of financial analysts, I want to say, in the beginning, that I realize there has been a lot of comedy, and you have been very well entertained. I also realize that the hour is late. Therefore, I will try to fail to live up to my reputation of being a long-winded speaker. I think this is the first time that I have had the opportunity of appearing before this fine body of men and ladies, and I am reminded of the story that I have often told, but it is rather a propos now. On one occasion in Washington I was speaking at a dinner meeting of the publishers of the McGraw-Hill organization. As I looked around, I saw 50 or 60 men. I recognized a good many of them. I said to my associate, who was with me: "I seem to know a lot of the people here tonight. I wonder if I have spoken to this group before?" And he said to me, "I am sure, Mr. Chairman, that you haven't, or you wouldn't be here tonight." *(Laughter)*

I can well understand how some of my friends persuaded me to come, and I want to congratulate another Salt Laker in being elected as the new President of this Federation. We Utahans must stand together. *(Applause)*

Looking over your program, I feel rather inadequate in appearing tonight when I see the distinguished gentlemen you have heard. I happened to know some of them, and they are sitting in front of me tonight. Mr. Whitman of Western Pacific, Mr. Black of Pacific Gas and Electric and also a director of the U. S. Steel Corporation, Mr. Funston, Mr. Zellerbach, Mr. Follis, and others. I don't know of any group that is able to attract as their speakers such an able and distinguished group of men. It must be that you have some influence with reference to the securities that the corporations of these men are selling to the public. *(Laughter)*

I want to say this, however, that, knowing some of these companies and these men (I also see Mr. Davies here of the Food Machinery Company) if all securities offered to the public have done as well as the securities of these great western companies, then I am sure the public is not going to be bamboozled. These men are leaders of the West, and you people from the East, who have been here for the first time, I am sure, will realize possibly more fully than you have in the past the importance of the West to the economy of the United States, and that "This Is the Place," as Brigham Young said when he came out to Salt Lake. This is the place where the real development of this great country of ours must take place. *(Applause)*

ECONOMIC PROBLEMS AHEAD

I have been asked to speak to you on a subject that, at this late hour, cannot be the most amusing subject in the world, "Economic Problems Ahead." I only wish that I had the solutions. As I thing of our economic problems, I must think of our political and social problems, because all of what we term "political problems" in the final analysis resolve themselves into social and economic problems, which we have always had, so far as I can remember, and I hope we will always have them. They only differ in type, and that, of course, is related to the times. The *very essence* of democracy, the very essence of the freedom we desire to enjoy, means problems—economic and social and political problems. It means the problems that we all have an opportunity to participate in solving. So long as we can maintain *freedom of speech, freedom of election,* and *freedom of worship,* I don't think that we need to have too much concern about the future.

Basically, our economic problems are related to our type of system which we refer to as a capitalistic democracy rather than fascism, communism, or state socialism. We will always be confronted with the issue of how we are going to be able to expend the entire national income, which we speak of as the income derived from the total national product. Currently everybody is receiving income, corporations, individuals, and every sector of our activity. The problem is: how to keep up the expenditure of that income. Now, that income must be currently expended either on consumer goods, perishable goods, or durable goods, or it must be expended on capital goods. It has to be expended, and, whenever it ceases to be expended, or whenever our supply of money turns over more slowly, we begin to get what we speak of as a contraction or a recession. Whenever the total income that everybody receives is being spent, and when, on top of that, we add to the supply of money faster than we can increase the goods and services available for that money to be spent on, we get inflation. Both inflation and recession are bad. What we want is economic stability within some range. We don't want inflation to go to the point that it tends to destroy our insurance, our pensions, our annuities, and our savings group, what we speak of as our creditor class. Neither do we want, on the other side, the economy to contract to the point where the debtors are unable to meet their obligations, such as we had in the '30's.

DEFLATION AND INFLATION IN TWO DECADES

We have had, within a short range of two decades, the most extreme deflation and the most extreme inflation. These are both bad for our economy. It is the excess and the extreme that we want to try to prevent, and the problem is: "How do we accomplish that purpose?" I would like to speak to you a few minutes about money, and, in connection with money, of course, bank credit. All the money we have was created by our commercial banking system. Whenever the commercial banking system expands loans on balance, whether to the Government or to individuals, to corporations, cities, counties, or states, it brings into existence an increase in the supply of money. I want to read this statement that was made by Garrett Garney about credit, which is the basis and the source of the creation of money:

> In all the discoveries and inventions by which we live and die, this totally improbable helix of credit is the most cunning, the most liable, the least comprehended, and, except for high explosives, the most dangerous.
>
> Modern credit, as we know it, or think we know it, is a new and amazing power still evolving and still untamed. Men have been much more anxious to release the power of credit, to exploit it, than to control it, or even to understand it.

I think the basis for inflation and deflation is too little credit or too much credit. I am not entirely what I would call a quantitative monetary theorist, that is, one who thinks that merely the quantity of money by itself determines the price level or the stability of the economy, but I believe it is by far the most important factor. The use, or what we call the velocity or the turnover, of the supply of money, is another factor in the economy.

Let us talk for a moment about where this supply of money comes from. It comes, as I said a while ago, from the expansion of bank credit, whether to individuals, governments, or corporations, and it is through bank loans that the supply of money grows and expands. If that expansion in the means of payment or supply of money through bank credit and the willingness of those who own the money to spend that money exceeds the supply of goods and services available, we have inflation. That is inevitable. The reason we have had inflation in the last several years, since the beginning of World War II, is that we increased the supply of money about 300% and we increased it much faster than we increased the supply of goods. That was due—until the end of the war—to the Government's very rapid expansion of Government credit through the banking system.

Since the war the Government has not been responsible, contrary to what a great many people think, for a further growth in the supply of credit or the increase of the supply of money.

GOVERNMENT DEFLATIONARY SINCE 1946

Since the beginning of 1946, the Government has actually been deflationary in its monetary policy because it has collected more in taxes than it has expended by a substantial amount, but what happened was that the large volume of money that it created during the war began to get into velocity again, to get in use, into circulation. The backlog of demand for goods on the part of the public was such that, with this rapid flow or expenditure of money, there has been a very great growth in private bank credit, not to the Government, but for private industry and private individuals. Even since the Korean war began there has been a growth of nearly $15 billion in private bank credit, that is, a growth in the supply of money and bank deposits, even in that short period of time.

RELATED TO CREATION OF MONEY

I wanted to indicate to you that these problems of inflation and deflation are related to the creation of money and the use of money. So long as the Government spends money in excess of what it taxes, then it must borrow that money, and, if it borrows that money from the owners of money rather than from the banks, then all it does is put into circulation the money that is already in existence. When the Government goes into deficit financing (and it isn't done through the banking system) it merely borrows from savers, corporations, or those who have funds lying idle to invest and who are willing to buy the Governments. To the extent that the Government puts credit into circulation, it runs a deficit. But, when it borrows from the banking system, it creates new money, and that is inflationary. The Government has not added to the inflationary picture since World War II, but it added enough during the war, plus the postwar bank credit and expansion, and so that is why we have inflation.

PRIVATE CREDIT NOT EXPANDING

We are pretty well caught up at the present time. Private credit is not expanding on balance; it has pretty well flattened out. The Government and the banks are not creating additional money through bank credit. What has happened is that the people who are getting part of this national product are saving more than they have ever saved, except during the war. They are saving it in various forms—at the present rate of about $20 billion a year.

In 1946 and 1947 they were saving about $6 billion a year. Now today they are saving this money in the form of insurance, in the form of savings bank deposits, and payment of debt, which is a contraction of the supply of money. If they pay a debt to an insurance company or a savings institution, that institution has the money to loan to someone else. So we have today about $20 billion of individual savings. The corporations will have possible $7 or $8 billion after taxes and dividends, for reinvestment, plus depreciation and obsolescence, because those items add to the supply of money for investment, and, with the certificates of necessity issued by the Government, this will amount to about $17 billion.

WILL EXCEED $40 BILLION

Now all that is money savings, and that combination will exceed today $40 billion. The question is: How do we use those savings on new capital investments? Unless they are put back into circulation, we get a downturn. Corporations last year spent in capital expenditure a total of about $23 or $24 billion. It is estimated they will spend somewhere around that this year, maybe less. Then we have housing and municipal financing on balance. To the extent that the Government deficit, together with corporate investment and housing financing, will use up this savings, then we will tend to stabilize the economy and we won't get a downturn.

DIFFERENT PROBLEMS IN FUTURE

But, as to what the future will bring, it seems to me that we are facing some very near and some very different problems. For a long time we have found very large demands in the foreign markets, and these have been, of course, financed largely by our Government. We have had a huge defense program. We still have one, but, in spite of the defense program, in spite of the World Aid program, we have been able to collect approximately enough taxes to pay for those expenditures currently and still accumulate savings. I think this is different from what most of us had expected. We had no idea that we could take out of the economy for defense and take out for World Aid the amount that we are taking out, pay for it currently, and at the same time build up savings to the extent to which we are building them up, after the kind of taxes we have been paying. That is the real paradox of the situation.

It only indicates the terrific problem that we face—to find ways and means of distributing purchasing power adequately to utilize our mass production on the basis of a balanced budget. This is, I think, the problem of the future.

EVERY COUNTRY INCREASED PRODUCTION

Every country in the world, practically, has increased its production very substantially. The Japanese, the Germans, the British, the French, Italians, all of them are now entering the various markets of the world that have had to depend almost entirely on our supply, and we are now confronted with the problem of how are we going to be able to distribute, how are we going to be able to find markets for the mass production that our technology has been able to create for us.

There is no question about the needs of the world, if the rest of the world lived upon the same standards that we have today. The question is: How we are going to distribute what we are able to produce with the technical machinery that we have developed and the efficient man power that we have?

I think, looking to the end of the year, that we are headed, for the first time, since 1946, for a substantial deficit financing on the part of the Government. There is every indication that the deficit financing will reach not less than $5 billion, and perhaps substantially more, depending on the amount of taxes the Government is able to collect. We find that in a depression, as a downturn comes, the Government has far less taxes than it anticipates, since the downturn reduces the amount of taxes below what is estimated. Just as in the last five years the Government has underestimated the taxes it was going to collect, which is one reason we have had a budgetary surplus. The inflation in and of itself makes for profits, makes for income and, hence, makes for higher taxes. I mean higher income from taxes than the Government estimates; therefore, we have had a budgetary surplus. Now this is leveling off. We find for the first time that the Government's estimates have fallen short, and, therefore, the deficits of the future may be larger than have been expected or anticipated.

TEND TO MAINTAIN STABILITY

Those deficits will tend to maintain stability in the economy because the Government borrows from the savers, those who have their funds unused, and will put these funds into circulation and will give employment, or it will borrow from the banking system, or it will borrow from both. If it borrows from the banking system, it will increase the volume of money and put the money into circulation. The Government's deficit will tend to compensate for a private credit contraction, or it will compensate for the slowness or the lack of velocity on the part of those that hold money idle. Therefore, I would say that the substantial Government deficit will be a stabilizing force for the remainder of the year. To the extent that private industry reduces the volume of its expenditures, to the extent that the volume of housing is reduced, and to the extent that the Government cuts its expenditures, just to that extent we may well get a deflationary situation. That seems to me to be inevitable.

MONETARY CIRCULATION AND EMPLOYMENT NECESSARY

I hate to think of a paradoxical situation developing in which we must have public deficits to offset the failure of private industry or individuals to use their money sufficiently to keep up monetary circulation and employment, which is necessary in order to maintain the economy. Now, we do have some factors that have made, and are making, for instability. That is the disequilibrium being created by certain fields of labor. If the entire economy were able to get the increase of wages and inflation benefits that organized labor is demanding, then, of course, organized labor would get no real benefit, and we would get stability at a higher price level. But what is taking place today is that certain groups in the economy are getting income substantially in excess of what the masses of the public are getting, and, therefore, we have a disequilibrium.

LABOR PRICING SELVES OUT OF MARKET

I say that organized labor in the steel industry, the automobile industry, and in the building industry are pricing themselves out of the market because their income has gone up substantially faster than the income of agriculture, the income of the unorganized, and of the fixed income and pension income groups. That is one of the great difficulties in the economy today, and the net result is that people are saving their money, because they will not pay the prices that are being forced up by the increases being demanded by organized labor. That is one of the great weaknesses today in our system. *(Applause)*

And in the interest of labor itself, if it wants to maintain employment, if it wants to maintain stability of the economy, then labor groups should not make the demands that today can well bring about a deflationary situation rather than a condition of economic stability. *(Applause)*

GREAT FAITH IN OUR COUNTRY

I have great faith in this great country of ours, although we are facing problems that are difficult and acute. I believe that we have the intelligence and the capacity to meet them just as we met the economic and social problems that we experienced during the period of defense production and war. I am sure that we realize now that they are coming to the fore, and will do so increasingly as peace develops in the world, and there is greater indication today that Mr. Stalin wants peace rather than war. That may well bring about a cutback. If it doesn't bring about a cutback, it will bring about a greater supply of raw materials and other goods in the world. That sought-for world peace is going to bring us economic problems, and the problems are going to be how to produce fully, and how to distribute our abundance under conditions of full employment within the framework of our free enterprise system. I am sure that is going to be the great challenge to you financial analysts and to all the rest of us. *(Applause)*

* * *

Chairman Bretey: Thank you Mr. Eccles.

Mr. Held has another announcement.

Mr. Held: In closing, I wish to express our appreciation to our fellow member, Lewis B. Reynolds, for requesting, and to the president of Italian Swiss Colony, General John R. Deane, for furnishing without cost the fine wine that graced our tables tonight. As many of you may be aware, Italian Swiss Colony is a subsidiary of National Distillers Corporation. Though time does not permit our eastern members to visit Italian Swiss Colony's modern winery at Asti at this time, I am sure that, when you come to California again, you will find it well worth your time to see this modern plant and partake of the Colony's hospitality. Thank you.

Chairman Bretey: Gentlemen and ladies, we are now adjourned until tomorrow morning.

George Shimmon

At the metals and minerals forum *(left to right):* Chairman Robert H. Goff, and Speakers Donald B. Macurda, P. J. Lovewell, and Donald Browne

Metals and Minerals

TUESDAY MORNING, MAY 6, 1952

ROBERT H. GOFF, Automobile Mutual Insurance Company of America, Providence, presiding.

Chairman Goff: Good morning, everyone! I am certainly glad to see so many bright, shining faces here at this hour in the morning. I guess we'll have to give credit to the San Francisco air, or possibly a little Alka-Seltzer.

Now, is everyone comfortable, and can you all hear? If you can't, there are a few vacant seats down front. The metals and minerals forum is about to start.

PROGRAM FULL AND INTERESTING

The program is extremely full and very interesting. After making every effort possible to schedule the three talks and still save some time for questions, we decided it was just not feasible to have any question period. You will have to buttonhole the speakers privately later. I am pleased that it is my lot to call this meeting to order at 9:00 A. M. this morning, rather than 9:00 P. M. last night! You fellows certainly gave Bill Held a rough time.

Our first speaker has been closely associated with Kaiser-managed companies since 1935, after working five years for the Pacific National Bank from 1930 to 1935. He was graduated from the University of California in 1930.

His activities took him up into the Northwest, while Columbia Construction Company was working on the Bonneville Dam in Oregon. He next spent some time with the following Kaiser-controlled companies: Henry J. Kaiser in Oakland and Permanente Cement in Los Altos, Calif. In 1941 he was appointed administrative manager of Permanente Cement and Permanente Metals Corporation (now Kaiser Aluminum and Chemical Corporation). When the war started, he was assigned to Kaiser Steel Corporation and Kaiser Industries, Inc., as administrative manager from 1942 to 1945.

After spending the next year as administrative manager of Kaiser Services, he moved along to Kaiser Aluminum and Chemical Corporation as comptroller and in 1950 was elected vice-president and treasurer, which offices he holds at the present time. So you can be sure Mr. Browne is not telling you something he has read in a book; he has the facts. Here is Donald Browne, vice-president and treasurer of Kaiser Aluminum and Chemical Corporation, who will give us the "Outlook for Aluminum." *(Applause)*

* * *

Donald Browne: Thank you, Mr. Goff. Ladies and gentlemen, few materials have more interesting future prospects than aluminum. None present more of a challenge, because the commercial history of aluminum began within the memory of living men, whereas other common metals—iron, copper, and lead—used widely for more than a thousand years, are firmly entrenched in modern industrial practice. Fabricating, alloying, joining, and coating methods for these metals have been under intensive development since the industrial revolution. A hundred years ago aluminum was a curiosity more costly and rare than precious metals. Sixty years ago aluminum was developed for commercial use and then only through the conscientious efforts of the producer to utilize its product in consumer goods to achieve market acceptance. The producer was well aware of the many fine properties of the metal, particularly its light weight and relatively high strength, its conductivity of heat and electricity, and the ease with which it is formed and alloyed. Acceptance of the metal by fabricators has been slow because in many instances new techniques were required to complete fabrication—or joining—or coating—or other processes to produce an acceptable consumer product.

HUGE CAPITAL INVESTMENT

Production of aluminum requires a huge capital investment—in fact, at today's prices about $1,000 per ton of ingot capacity—and therefore, until recently, development of metal sources has been relatively slow. The Aluminum Company of America, the first producer in North America, gradually increased its capacity during the early years of this century and devised fabricating and other processes adapting aluminum to industrial uses. Development of aluminum was limited by the industry's inability to invest the capital required.

PRIMARY CAPACITY INCREASED FIVEFOLD

World War II and its tremendous aluminum requirements resulted in increasing primary capacity in the United States more than fivefold, to a million tons a year. Further, the great expansion in the aircraft industry and in fabricating plants necessary to produce parts required by that industry introduced thousands of individuals to the properties of the metal and trained them in methods needed to convert it to practical use. This knowledge, together with lower prices—possible because of increased production—made aluminum far more competitive with other metals than it had been previously.

GOVERNMENT-OWNED PLANTS SOLD OR LEASED

At the conclusion of World War II some Government-owned aluminum reduction plants were sold or leased to Reynolds Metals Company and to Kaiser Aluminum & Chemical Corporation, thereby establishing two additional major participants in the industry. The postwar boom resulted in substantial increases in prices of other metals and serious shortages in the supply of most of them. Availability and low cost, combined with knowledge of fabricating techniques, introduced aluminum into many fields never before open to it—either because it was too costly or because sufficient know-how to apply it was not available. Admittedly, in the beginning much of this market was in substitution for other metals, but the trend of price relationships increasingly favored aluminum, and the constantly expanding supply has more firmly entrenched aluminum in these markets. In most instances today it cannot be considered a substitute but rather a direct replacement of material formerly used. This trend toward the use of aluminum had become so compelling in 1948 and 1950 that demand greatly exceeded supply and the industry was unable to furnish all requirements—even in applications where aluminum was specified for physical properties or cost factors, and, of course, no aluminum was available to substitute for other materials. These surges in demand and recurring shortages, which have been frequent in the history of aluminum, have made it impossible to utilize the metal to a very large extent in industries dependent on production-line operations and varying market demands. Naturally, the automobile industry cannot afford to utilize large quantities of aluminum if, in periods of maximum automobile sales, aluminum will be unavailable, therefore requiring changes in tooling and models in order to use substitute materials.

OPERATION UNDER COMPETITIVE CONDITIONS

Not all the aluminum capacity constructed during World War II was capable of economic operation under competitive conditions, and, therefore, commercial capacity in the United States during postwar years was substantially less than maximum capacity available during the war. Aluminum producers recognized the shortage of capacity and during these years improved their methods and added to their facilities. A major part in this expansion of capacity between 1946 and 1951 was undertaken by Kaiser Aluminum & Chemical Corporation with which, of course, I am most familiar. Our productive capacity was increased before Korea by approximately 62%, by the purchase of a new reduction plant, addition of a new pot line at an existing plant, and improved operating efficiency which increased the output from existing facilities. Other producers added to their capacity which enabled the industry to produce primary aluminum at the annual rate of 750,000 tons by the end of 1950. Further plans were being formulated for additional reduction capacity for construction in 1951 and 1952.

MEETINGS WITH INDUSTRY

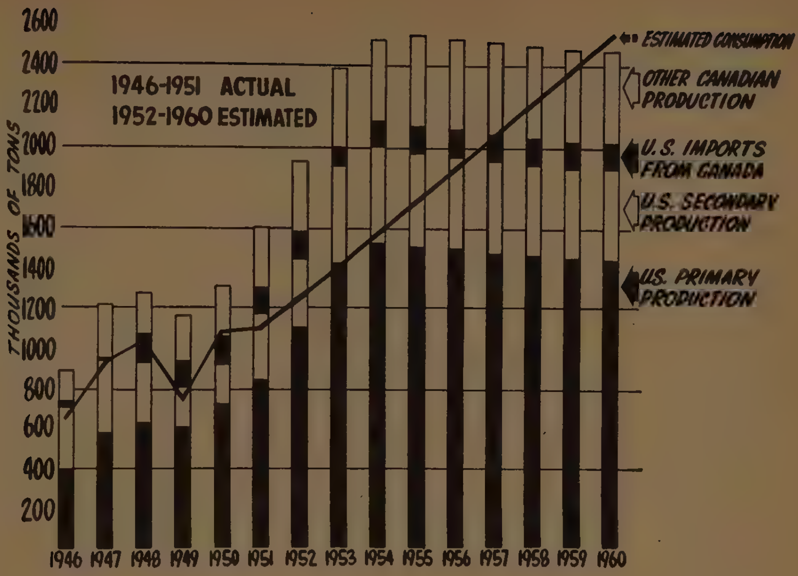
Because the current emergency recalled the World War II shortage of aluminum capacity, the Government requested meetings with industry to consider means of increasing domestic primary capacity to an extent that would provide adequate metal for both military and civilian demands. The program thus developed consisted of two steps, each providing for construction of new reduction capacity, and all aluminum producers are participating. In addition, Anaconda intends to enter the field. New capacity totaling 685,000 tons a year is being added: Alcoa 205,000 tons, Kaiser 228,000, Reynolds 180,000, and Anaconda 72,000. In addition, Alcoa has reactivated previously idle facilities to the extent of 79,000 tons, utilizing power purchased at rates not normally economical. At the completion of all these facilities, primary aluminum capacity will approximate 1½ million tons, double the 1950 capacity.

HUGE EXPANSION CAUSED CONCERN

This huge expansion of capacity has caused concern in the minds of many people not intimately associated with the aluminum industry. Even the industry itself felt unable to accept this risk years in advance of the projected demand, without assurance that reasonable opportunities would be available to support the industry for the period required to develop markets for this vast new quantity of aluminum. To encourage producers to go ahead with this expansion, as well as to make financing possible, the Government has executed with each producer supply contracts covering five years' production at full capacity, wherein the Government agrees to purchase any metal produced in the new facilities not sold or used in commercial channels. These contracts, together with certificates of necessity permitting accelerated amortization of a substantial part of the cost of the facilities, have made it possible for aluminum producers to raise over $600 million required for completion of the program. A high percentage of this new capacity includes power-generating facilities, drawing on natural gas or lignite as their source of prime energy, providing flexibility not available to plants operating on firm power contracts deriving their source of energy from hydroelectric projects. This greatly increased capacity, subject to flexibility, assures a more adequate source of metal and should help solve the problem of recurring shortages.

SIZE OF INDUSTRY DOUBLED IN 5 YEARS

Doubling the size of an industry in a period of less than five years is startling in its concept. This program, including the supply contracts, is reasonable if the growth of the aluminum industry over its relatively short life and its particularly rapid growth in the past ten years are given



Aluminum Production in the United States and Canada and U. S. Consumption of Aluminum

proper consideration. The program is huge in relation to the industry's prior capacity, but it is important to retain perspective in relationship to other industries. At completion of the present program, capacity of the aluminum industry in tons will amount to less than 1½% of that of the steel industry, and only about 4% compared on a volumetric basis, taking into account the fact that a ton of aluminum in many applications is equivalent to about three tons of steel.

CONCENTRATED IN NORTH AMERICA

Since World War II the aluminum industry has been concentrated on the North American continent. In addition to the domestic producers, Aluminum Limited, the Canadian producer, is a major factor in the industry—principally in foreign markets. Aluminum Limited also increased its capacity during World War II and the postwar period and is proceeding now with the installation of additional capacity, with plans for further increases as market demands warrant investment of capital.

INCREASED TO 1½ MILLION TONS

Capacity of the U. S. aluminum industry plotted on the chart for the period from 1946 through the present and projected to 1960, including expansion programs now under way, shows an increase from 400,000 tons in 1946 to nearly 1½ million tons in 1960. A line on the chart shows the production of secondary aluminum projected through 1960, and, above it, Canadian capacity including the announced expansion. The aggregate metal supply in the North American continent is thus projected to be roughly 2½ million tons in 1960. An additional line based on historical data to 1951 has been drawn on the chart dividing Canadian production between U. S. imports and sales in the world market. Total U. S. metal supply in 1960 is the sum of primary capacity, secondary production, and imports from Canada and is estimated to be slightly in excess of 2 million tons. All of these data are predicated on no full-scale mobilization, and no attempt has been made to estimate the additional capacity that would inevitably be provided privately by the industry before 1960 in the event actual demand should develop in excess of the industry's capacity.

PREDICTING FUTURE MARKET POPULAR

Predicting the aluminum market in future years has been unusually popular in 1951. Each of the four present North American producers has prepared its estimates, and the Government, through the Office of Defense Mobilization and the Bonneville Power Authority, has prepared two estimates. All of these estimates have one thing in common; that is, by 1960, if no further expansion is assumed, aluminum is more likely to be in short supply than in oversupply for any extended period. All of these estimates have been prepared independently and, I am sure, in the aggregate have taken into consideration most accepted methods of estimating future markets. In common with most manufacturing concerns, Kaiser Aluminum maintains a market research department which continually studies the demand for aluminum and aluminum products. During 1951, the results of five years' market study, consuming more than 150,000 man-hours, have been summarized, and the potential 1960 market has been evaluated. Kaiser Aluminum's forecast is in the lower area of the range between the high and low of the six projections considered. This position in relationship to the others may rise, as our forecast has given no weight to revolutionary developments, now the subject of intensive research, that might well develop markets for aluminum greatly in excess of even the expanded industry capacity. Information is not available to me as to whether any of these major developments have been considered by the other forecasters, but I believe our purposes are best served by using the composite of the six projections. The full detail of these forecasts has not been made public, and our market analysis department has interpreted the published data and attempted to adjust the forecasts to comparable bases. The composite figure, modified by these adjustments, indicates a total demand in the United States of 2,600,000 tons in 1960, including estimated requirements of the Government for defense purposes without provision for full-scale mobilization. These composite demand data have been superimposed on the chart, showing the projected available supply of aluminum, and they indicate a demand in excess of supply amounting to 600,000 tons. The consensus is that there will be sufficient demand for aluminum to utilize effectively all currently proposed reduction facilities.

REPLACING MORE COSTLY MATERIALS

Aluminum, because of its unique physical properties, is replacing more costly or less satisfactory materials in industry, and the results of the composite forecast indicate that informed opinion evaluates these factors in much the same manner. The principal advantages of aluminum in the metal markets of the future are its light weight and other physical properties, including its ability to conduct heat and electricity, its price in relationship to other metals, its increased availability, and the fact that additional production of the metal encourages a much larger technical staff and stimulates interest in developing new applications and methods of processing.

LIGHT WEIGHT NECESSARY IN SOME FIELDS

In some fields, light weight is so necessary that this property of the metal designates aluminum for use irrespective of cost. An example of this application is the aircraft industry where weight saving is of prime importance. A more important application in the aggregate, one that today utilizes large quantities of aluminum and that we believe will be even greater in the future, is instances where the reduction of weight achieved by using aluminum also reduces the cost or improves the efficiency of the finished product. This application is well known in trucks, trailers, buses, and railroad equipment where increased pay loads and greater fuel economy result. An additional vast field is opened through reduction in transportation cost by designing lighter-weight products made of aluminum. Reduced weight of structures through use of aluminum saves cost by requiring smaller quantities of other structural materials. Other physical properties of aluminum add to its value in this application, in that it resists corrosion, is pleasing in appearance, and will not rust or tarnish.

ONE THIRD AS HEAVY

Because aluminum is only one third as heavy as other metals, a pound of aluminum in roofing sheet will cover two to three times the area covered by a pound of galvanized steel, a pound of aluminum electric conductor will transmit a comparable electric current twice as far as a pound of copper conductor, and a pound of aluminum will protect nearly four times as much cable with sheathing as a pound of lead. In the field of weight saving, aluminum is subject to the challenge of new metals—magnesium and titanium—which at the present time are noncompetitive owing to the qualities inherent in the metals, resulting in high fabricating costs. No doubt in the years ahead improved methods of fabricating these metals will be developed, and the aluminum industry accepts this challenge to improve its own techniques and to reduce the cost of aluminum still further, thus retaining its leading position as the prime weight-saving material. Aluminum enjoys a favorable price relationship with other nonferrous metals and in many cases is approaching a competitive relationship with steel.

BAUXITE

Bauxite, the principal raw material for aluminum, is found in commercial deposits throughout the world. Even today the development of bauxite mines in near-by Jamaica by Aluminum Limited, Reynolds Metals, and Kaiser Aluminum will produce a more economical raw material than any now in use, excepting the relatively limited deposits in Arkansas. Other nonferrous metal industries have been working consistently lower-grade ores for the past fifty years. Today, I understand, many of the copper companies are working ore deposits averaging less than 1% copper content, and there are few, if any, indications that more high-grade low-cost deposits of nonferrous ores will be developed in the near future. Because of the importance of raw materials in the cost of a metal, it appears that normal economic factors will tend to reduce the cost of aluminum compared with that of other metals, and we anticipate that the favorable cost relationship will continue.

ALUMINUM CONDUCTOR LESS COSTLY

At today's prices, electric conductor made of aluminum is considerably less costly than comparable copper conductor. Use of aluminum in electric transmission lines in the form of aluminum cable, steel reinforced, has continued for many years, and most transmission lines being installed today are aluminum. Related advantages are achieved because of its light weight, further reducing over-all cost of aluminum transmission lines through use of lighter tower design and greater spacing of towers.

LARGER SUPPLY ASSURED IN FUTURE

The Government has secured co-operation from the aluminum industry to assure a larger supply of aluminum in the very near future, and, therefore, through its Controlled Materials Plan is guiding replacement of critically short copper with aluminum. In issuing allocations and directives for aluminum to replace copper, the Government has attempted to allocate aluminum to those uses where the metal has either a physical or a cost advantage, or both, over copper. This enforced substitution of aluminum for copper in fields where it is economically sound will result in a permanent acceptance of aluminum.

IMPORTANCE OF ABUNDANT RAW MATERIAL

I cannot overemphasize the importance of abundant and economical raw material and its relationship to the future use of aluminum. Exhaustion of high-grade natural mineral resources throughout the world has been a cause of serious concern for many years, and in certain materials, notably the nonferrous metals including tin, the supply of these economic ores is particularly critical. Aluminum, in the form of its oxide, alumina, is one of the most common materials on the earth. Economic deposits of bauxite, the ore from which alumina is extracted, are known to be extensive, and many undeveloped sources of bauxite exist. Some of these deposits are remote, but at the present time low-cost raw material has been proven to the extent required by the industry for many years. This available economic raw material is assurance that the supply of aluminum will not be restricted for this reason in the foreseeable future, nor will there be strong upward pressure on prices due to utilization of lower-grade or less economic ores. These factors support our opinion that a favorable price relationship in comparison with other metals is a permanent long-range factor encouraging greater use of aluminum.

BEGAN 60 YEARS AGO

The aluminum industry, having had a small beginning only sixty years ago, has had relatively limited time and resources to apply to research for broadening the ultimate use of its product. The progress made by the industry in the past ten years has demanded that great numbers of skilled research and technical personnel apply themselves to finding new uses for aluminum. The prosperity that has been enjoyed by the industry for ten years has made possible the appropriation of very substantial sums to further this research and technical work. I am sure all the producers have reserved major sums in their financial plans for this purpose during the period ahead. Though it is impossible to be specific about the results or benefits to be achieved through technological studies and activities, it can be expected that the spectacular results achieved in the past ten years will be surpassed in the next ten—if for no other reason than the increased tempo of activity in research.

I would like to be able to list a series of industries that within the next few months or years will definitely convert their operations to the use of vast quantities of aluminum. Unfortunately I cannot—but I can, however, tell you that the building industry, the transportation industry, the electrical industry and many others, if permitted by Government controls, would utilize much greater quantities of aluminum than are available to them now. I can point out to you a factor that I am sure has been taken into account by each of the groups forecasting the future aluminum market. Consumption of aluminum per capita in the United States has constantly increased and the growth of aluminum use over a period of years has greatly exceeded the normal industrial growth of the United States.

NEW APPLICATIONS

I can also point out to you a few relatively new applications (some of which have been restricted because of the defense requirements) that will stimulate your imagination to see ultimate applications of aluminum in many other fields. Recently aluminum foil was introduced for household wrap; though I have no statistics to verify this, I doubt whether many other new consumer products have been received with such immediate and overwhelming acceptance. I am sure that my experience has been duplicated by many other individuals employed by aluminum producers in that I have personally received numerous appeals for "a package of Kaiser foil."

Some of you have no doubt purchased electric light bulbs with aluminum bases replacing the previous brass bases and have seen aluminum sockets in lighting fixtures. Aluminum has proved its economy in this application in that it can be processed and soldered on automatic machines. Aluminum is so firmly entrenched in this application that we are confident that, given available supply of light-gage high-specification aluminum sheet, all electric lamp bulbs will have aluminum bases.

ALUMINUM TRIPLEX CONDUCTOR

In recent months there has been a growing tendency to utilize aluminum triplex conductor for service drops to furnish power for industrial and residential use. This product, consisting of three aluminum wires, two insulated and one bar, replaces a copper product and, in view of its lower cost, is headed for greater application throughout the United States in the future. Aluminum wire is suitable for almost all electrical applications, including telephone and telegraph lines, and the problem of soldering joints in the field appears near solution.

ALUMINUM COATING FOR STEEL

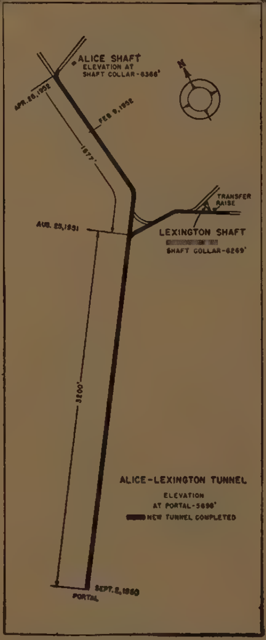
Several processes have been developed for applying aluminum coating to steel to produce a material of more pleasing appearance, giving better performance than the present galvanized products. Bonding aluminum to steel presents process problems more costly than the galvanizing process which we believe will be more than offset by the lower price of aluminum compared with zinc. Introduction of aluminized steel has been made by Armco, and additional producers of this product will undoubtedly be in the field in the next few months.

MANY OTHER USES

These examples present but a few of the everyday applications of aluminum which have already been developed and seem certain to have further growth with increased availability of metal. There are many other uses to which much technical effort is now being applied but which have not yet reached the stage of introduction into the normal market. Visualize for a moment development of a cast-aluminum automobile engine block, more efficient and economical than a cast-steel block; chrome-plated aluminum die-cast trim, replacing at less cost present zinc die castings; aluminum containers made on high-speed automatic equipment and produced at competitive costs or lower costs than present containers; adaptation of present practices of forging wheels to much larger equipment for huge forged aircraft parts, making economical and practical the construction of larger aircraft, with a resultant saving in time and transportation cost. All of these suggestions are under intensive study, and all appear to have the possibility of conclusion, resulting in aluminum filling a need for a more satisfactory and cheaper product. The successful conclusion of one or more of these projects can well require a further expansion in the aluminum industry.

The final development and introduction into the market of these last-mentioned items would, of course, materially alter the usage of aluminum by end products. Other projections of the future market have not contemplated any such revolutionary developments, but have been more con-

Portal of 5,469-foot tunnel being driven through Butte Hill, Montana, to connect the Alice and Lexington mines with railroad grade. Diagram shows route of tunnel, with completed section in black.



Digging into YESTERDAY for more ZINC today

Anaconda's historic Alice and Lexington mines on Butte Hill were rich in silver 75 years ago. Today they are being mined for their wealth of zinc—as part of Anaconda's program to increase the capacity to produce from the Company's own mines. The new tunnel, which is now nearing completion, links the two shafts to railroad grade and greatly facilitates the mining operation through improved ore handling.

To handle the increased ore production from the Butte district, the Company is expanding its concentrating and electrolytic plants at Great Falls and Anaconda, Montana. This expansion includes installation of additional crushing, milling and flotation equipment—added leaching units—and new Cottrell treaters to reduce dust losses at the zinc roasting furnaces.

In 1951, Anaconda turned out 62% of all electrolytic zinc—and 23% of all slab zinc—produced in the United States. Within the next few years, the Company's accelerated zinc program will increase Anaconda's mine output capacity by an estimated 50%.

This zinc story is just one part of Anaconda's continuing program of expansion, improvement and modernization—at mines, mills and fabricating plants. Today the program is producing more metal and finer metal for America's strength. Tomorrow it will mean better products and better living for America's people.

ANACONDA'S FAMILY OF METALS
Copper, zinc, lead, silver, gold, platinum, cadmium, vanadium, selenium, manganese ore, ferromanganese.

ANACONDA
COPPER MINING COMPANY

Anaconda Sales Company
The American Brass Company
Anaconda Wire & Cable Company
International Smelting and Refining Company
Andes Copper Mining Company
Chile Copper Company
Greene Cananea Copper Company

servatively based on those products already using aluminum as the most satisfactory and economical material, and have taken into account the growth of industry and further penetration of aluminum in each field.

WILL NOT CHANGE APPRECIABLY

We do not anticipate that the market pattern will change appreciably by 1960. We believe the building industry will still be the largest consumer of aluminum, accounting for approximately 30% of the market; automotive and transportation is expected to be second, with approximately 20%; next will be electrical uses and machinery at 10% each; and the remainder will be for appliances, utensils, and miscellaneous items.

MATERIALS IN SEMIFABRICATED FORM

The major portion of the materials used by these industries will be in semifabricated form distributed approximately 40% in sheet and plate; 25% in the form of castings; 15% in wire, rod, and bar; 10% in foil and extruded products; and the remainder in miscellaneous minor products. This distribution of the industry's products points out very clearly that, before the 1960 market is achieved, further substantial expansion in the fabricating capacity of the aluminum industry will be required. In order to serve the commercial market properly, it is necessary to have fabricating capacity substantially greater than the total metal supply. In the United States the ratio of fabricating to metal supply appeared to be in reasonable balance before the addition of the ingot facilities now being installed. This ratio at the close of 1950 was about 160%. After completion of the present program the ratio will be about 100%. In order to supply the estimated 1960 market in the required product forms, substantial additions must be made to fabricating facilities in the industry.

No one in the aluminum industry believes that attainment of these markets and introduction of aluminum into these products will be easy. The industry has already accepted the task and responsibility of expanding primary capacity at a fantastically rapid rate and is prepared to solve the problems arising out of such expansion. The industry recognizes the problems created by this additional capacity and approaches them with full confidence that intelligent application of sincere effort will result in uses of aluminum in excess of those now projected.

Let me again say that the preponderance of informed opinion is that the outlook for aluminum is a rapid and intensive growth based on its physical properties, its increased availability, the probability of a continuing favorable price relationship, and the greatly stimulated development efforts arising out of the vigor of a young and growing industry. *(Applause)*

* * *

Chairman Goff: Thank you very much. That is a very, very complete picture of the aluminum industry.

Why don't we all stand now and stretch a little bit? *(Brief recess)*

Chairman Goff: Before telling you anything about our next speaker, I just want to urge each and every one of you to see or read about the Stanford Research Institute, and the wonderful work going on in Palo Alto. The Institute has just finished its fifth year of service, and, although far younger than many of her sister institutions, is acquiring stature in a hurry. Of course its close affiliation with Stanford University, naturally, has not been a handicap. During 1951, 214 separate projects were worked on, 184 of them for commercial and Government sponsors. A glance at the list of the board of directors of the Institute will show you the high caliber of the sponsorship.

In 1938 Mr. Lovewell graduated from Washburn University in Topeka, Kans., and received an MBA from Stanford University's graduate school of business in 1940. Before going on active duty with the Navy in 1942, he was associated with the Burroughs Adding Machine Company.

Returning to civilian life in 1945, Mr. Lovewell joined the U. S. Steel Corporation as a cost control specialist. In this capacity he conducted studies of various subsidiary companies, including Oil Well Supply Company, Oliver Iron Mining Company, and American Steel and Wire Company. From early 1947 until his appointment to the staff of the Institute in 1948, he was a principal staff engineer of Paul B. Mulligan & Company, a New York firm of management consultants. In this capacity he directed extensive cost, organization, and management control studies, dealing with such firms as Air Reduction, Inc., Consolidated Edison Company of New York, and General Foods Corporation.

It gives me real pleasure to introduce Paul Joseph Lovewell, assistant chairman of the department of business and industrial economics of Stanford Research Institute, who will speak on "Industrial Uses of Radioactive Fission Products." *(Applause)*

* * *

Paul J. Lovewell: Thank you, Mr. Goff. Members of the National Federation of Financial Analysts Societies, as I go along here, if you have difficulty hearing me, or understanding me, I wish you would raise your hands.

MARKET OUTLOOK IMPORTANT

A factor of greatest importance in the long-range analysis of securities of industrial concerns is the market outlook for the products of the particular industry being studied. This is especially true if one is seeking to make, say, a speculative investment in some brand new field of technology such as atomic energy. The problem, of course, is that such market studies are difficult and expensive to make; the results are usually closely guarded secrets by those who pay for them; and the reliability of the studies depends entirely on the care and talent that went into their preparation.

RADIOACTIVE FISSION PRODUCTS

It may come as a surprise to you that a very thorough market analysis has been made of one facet of the atomic energy program: namely, the potential industrial market for the radioactive fission products that are a by-product of plutonium production. The study was made last year by the Stanford Research Institute, under contract to the U. S. Atomic Energy Commission. The Commission, feeling that the report on this study had value to people like yourselves and to industry generally, has made its findings public. My remarks today will first explain the way in which the study was conducted and then will summarize the results for you.

Why was the Commission interested in having such a study undertaken? This is a question we have heard frequently. The answer requires reference to some background data.

In the operation of nuclear reactors, uranium undergoes fission, or splitting, which results in the formation of radioactive materials which are the products of fission—hence "fission products." Neutrons are also given off in this fission, causing more uranium to turn into plutonium. Fission products include literally dozens of chemical elements. These elements, which we refer to *en masse* as "gross fission products," are separated from the plutonium by a chemical process and are then placed in underground vats of concrete and steel for safe storage. Today there are literally millions of gallons of these materials available. More are being produced every day. As reactors for power production become realities, the supply of fission products will grow even more. The cost of this storage to date is estimated to amount to many millions of dollars, and the total continues to grow.

IF INDUSTRIAL USES COULD BE DEVELOPED

The thought occurred to some of the AEC's engineers that at least a partial solution to this storage problem might be found if industrial uses could be developed for large quantities of fission products. That is how the Stanford study originated. We were asked to find out if large-scale uses for fission products might exist within industry and to outline the research requirements and management action that would be necessary to bring about any such uses.

The study proved to be an unusual adventure in the field of market research. In order to cover the essential angles to the project, it was necessary to put together a research team spearheaded by a chemical engineer, an industrial market analyst, and an industrial engineer. To these we added the part-time assistance of an eminent consulting chemist and a physicist. We found that we were being asked to invesitgate a market (1) for a nonexistent product, (2) having unknown uses, (3) to be sold to unknown customers, and (4) offered at a yet undetermined price.

Actually, this assignment was not so tough as it may sound. In defining the product, we were able to dig out a lot of information from interviews with AEC engineers and from AEC research reports. In making a start in seeking possible uses, we could build on known uses of other sources of radiation energy and on projection of the known properties of fission products into ideas for industrial uses. As for *customers*, we turned to the leading research-minded corporations in the country, and in addition we "advertised," as I will explain later. And as for *price*, we simply turned the problem around and sought estimates of the price that a particular use could afford. For example, if you are going to sterilize surgical dressings with radiation as a substitute for aseptic handling, we assumed you would have to do it on a cost basis, competitive with existing means, unless you could come up with a distinctly better product. But I am getting ahead of my story.

The preliminary diagnosis of the product convinced us that, although fission products are chemical elements, the significant thing about them is not their chemical or physical composition, but their radioactivity. Fission products are a potential source of millions of curies of radioactivity. *Millions of curies* of available radioactivity is a startling phrase, even to a scientist. We realize what this means when we recall that, since the discovery of radium, around the turn of the century, only a few thousand curies of radium are estimated to have been produced.

SOURCE OF CHEAP RADIOACTIVITY

Furthermore, fission products are potentially a source of cheap radioactivity. Compare about $18,000 a curie, the price for radium today, with possibly a few dollars per curie for fission products. A recent issue of *Life* magazine carried a story on cancer treatment with radium. The cost of the 54-curie source was quoted at $1 million. Compare this with 54 curies of the fission product cesium at an estimated cost of less than $1,000.

THREE FACTORS

In summary, we found the potential industrial usefulness of fission products to be a function of three factors: radioactivity, large quantity, and low price. After making this preliminary determination, we started looking for industrial uses that would take advantage of these factors. Our procedure was much the same as any commercial organization would use, finding itself in position to produce a new raw material, but in doubt concerning the nature and extent of the potential demand. We assembled all the information readily available on the material for the examination of our potential customers; we arranged for management and technical meetings with them to explore possible uses; and we reduced our findings to a report to management, in this case, the AEC.

The preliminary information assembled was published in booklet form. We called it "Putting Atoms to Work through the Use of Fission Products—a Prospectus for Management." This was our "advertising." We sent out over a thousand copies of this booklet, and followed it up with full-scale meetings with co-operating companies. Some 60 representative carefully selected companies were asked to participate. Only three declined. Our meetings were working meetings, a true exchange of information, at both the engineering and management levels. They averaged about half a day each in length.

Our team for this study was men who could talk the language of the engineer and at the same time grasp the broader problems of management. Of course the team received whatever help they needed from the technical and economic staff of the Institute, which now consists of about 350 full-time professional people supported by 100 clerks and technicians.

LARGE POTENTIAL INDUSTRIAL MARKETS

The general conclusion of our study, as I have indicated, is that there definitely are large potential industrial markets for radioactive fission products. The actual realization of these markets depends on solving a number of technical, management, and marketing problems, covered in some detail in our report. None of these problems is regarded as insurmountable; we have reason to hope that within a few years fission products will be contributing to our Nation's leadership and standard of living.

Perhaps you would like to hear, briefly, about some of the more significant possible industrial uses for fission products. There follows a summary of some of the more attractive potential uses wtih a brief evaluation from each of these viewpoints.

COLD STERILIZATION

Cold sterilization is a term that is gaining acceptance to describe destruction of all organisms present without increasing appreciably the temperature of the object being sterilized. The process has particular importance when sterilization with heat ruins the products (as antibiotic drugs, such as penicillin) or damages the product (as fresh meat or vegetables). The technology of cold sterilization has been fairly well developed, various sources of radioactivity being used. It appears that intensive effort in this field over the next two to five years might resolve remaining probelms, including elimination or minimization of undesirable side effects.

INDUSTRIAL RADIOGRAPHY

Industrial radiography utilizes the ability of radiation to penetrate an object and register a picture of its internal structure on a phograpic plate, in the familiar manner of the X-ray machine. This use is fully developed, employing sources of radiation other than fission products. A few years would probably be required to overcome peculiar problems surrounding the use of fission product sources. Lower-cost radiography would lead to wider use by industry. This could mean better, safer, lighter, stronger, or cheaper products, especially in the metal-making and fabricating industries.

ACTIVATION OF PHOSPHORS

Phosphors will not glow unless activated by some source of energy such as radium, black light, or sunlight. The use of phosphors activated by radium and by radioisotopes is commonplace, and certain fission products could do the same work. The cheapness of fission products should greatly expand this use. Phosphorescent signs that will operate without an outside power source have many possible uses.

STATIC ELIMINATORS

This use takes advantage of the ability of radioactivity to ionize the air. In a static eliminator, fission products will cause static electricity to pass off into the atmosphere. The use of such devices is common in industries such as printing.

INSTRUMENTS CONTAINING RADIATION SOURCES

Instruments of this category would utilize the ability of radiation to penetrate and be detected. An industrial thickness gage is a good example of the type of use contemplated; such uses are already fully developed with other sources of radiation. Fission products should work equally well for many applications.

Other proposed uses for fission products that have been studied and found to be of importance are (1) to activate chemical reactions, such as polymerizations, halogenations, and oxidizations, (2) to assist in the propagation of flame, as in jet engines, and (3) to provide a portable, low-level power source that could be left in a remote location and would function for years without refueling.

Some possibilities that are probably less promising, but that may nevertheless be found significant in the long run, include: (1) sterilizing and stabilizing beverages such as beer, (2) controlling and stimulating the fermentation process in converting grain starches to alcohol, (3) controlling bacteria causing fermentation of drilling muds, (4) controlling weevils and other insect pests in stored seeds and grains, (5) eliminating insect contamination in consumer packages of flour and other grain products, (6) coating underground cable to inhibit mold and fungus growth, (7) controlling fungus growth inside instruments, and (8) activating phosphors in the production of luminescent pigments for use in road signs, outdoor advertising, and the like.

LIST NOT COMPLETE

The list of possible uses presented here is not to be regarded as complete, but rather as illustrative of the types and kinds of applications that are now under consideration. The list as it stands is sufficiently impressive, and would require so many millions of curies to meet all the potential demand that the question may become one of the availability of a sufficient supply of cheap fission products.

NECESSITY FOR SAFE HANDLING

The necessity for safe handling imposes another sort of limitation on the industrial use of radioactivity. Suitable shielding and other provisions for safety are essential parts of any plan for industrial use. Several feet of concrete would be needed to shield a fission product source suitable for the sterilization process, for example. Phosphor signs would probably take the form of a plastic sandwich, with the fission products and phosphors embedded in the middle. All estimates of economic feasibility in this discussion have taken such costs into account.

Safe use is the reason that no products containing radioactive fission products should be sold to the general public. At the same time, however, there is *no* danger to the public from induced radiation in using products that have been *treated* with fission product radiation, as in a sterilization process. The reason is that fission products do not emit neutrons, and the beta and gamma emissions from fission products are not at a sufficiently high energy level to cause a nuclear reaction.

In conclusion, it should be observed that the most promising industrial possibilities for fission products appear to be in the development of *improved processes for existing industries,* rather than in the creation of new products. Improved means of sterilization, cheaper industrial radiography, more efficient techniques for industrial static elimination are certainly industrially important. However, such uses would not lead to the creation of new basic industries or the displacement of basic industries. Rather, the use of fission products will offer industry improved tools that can be used for the production of better or cheaper goods. Some important industries, such as food processing and metal working, may experience significant changes in their production processes and in the character of end products, but these changes will be of the same character as the evolutionary improvements constantly being experienced by industry.

OFFER BUSINESS OPPORTUNITIES

Besides affecting industries making use of the materials directly, fission products offer business opportunities to those who become expert in their handling and use. It appears that there will be a place for companies that will provide engineering services to manufacturers who want to use fission products but do not want to undertake all the complications and expense of becoming expert in the field. These engineering companies could, for example, design the equipment for using a radioactive source and supervise the installation, specify the desired type of source and install it, monitor the safe use of the source, oversee the process from a technical viewpoint, provide the service to renew or replenish the supply of fission products as required.

In addition, there is the possibility that appropriate means will be found for private industry to take over from the AEC the business of processing the gross fission products to obtain the desired separated and refined materials. Some aspects of this possibility are currently under study by Bendix Aviation Corporation and Tracerlab, Inc., working under a not-for-pay contract to the U. S. Atomic Energy Commission. *(Applause)*

* * *

Chairman Goff: Thank you.

I and, I'm sure, many of you enjoyed the company of our final speaker on the train coming West. He was born in one of the most delightful little villages it has ever been my pleasure to drive through, Wiscasset, Me. He claims it was even more charming before the advent of Route 1.

After graduating from Bowdoin College in Brunswick, Me., in 1929, he worked for Tucker Anthony & Company in Boston, then started West, landed in Los Angeles, and worked for the California Bank for two years. Home ties took him back to Boston, and he spent ten years in the research department of Estabrook & Company in their Boston office and another five years in the New York office of the same firm, heading up the research department.

After three years as head of the industrial research department of Clark, Dodge & Company, he moved over to the First Boston Corporation in 1950 as an assistant vice-president, where he is primarily concerned with new issue activity.

He is the principal author of "Aluminum—the Industry—and the Four North American Producers," and several other special articles on various industries, namely: chemical, steel, and nonferrous metals producers. I now give you Donald B. Macurda, who will speak on "General Outlook for the Nonferrous Metals." Don, you have 20 minutes to give us all of the conditions of supply and demand of other nonferrous metals. *(Applause)*

* * *

Donald B. Macurda: Mr. Chairman, ladies and gentlemen, as analyst speaker, or cleanup man, I know you will agree with me that little remains to be done on the subjects of "The Outlook for Aluminum" and "Industrial Uses of Radioactive Fission Products," which have been so ably, informatively, and authoritatively presented by our two preceding speakers. My own remarks, therefore, will deal mainly with the outlook for the heavier nonferrous metals, to provide a balanced forum program, and will only briefly touch "aluminum" and "fission products" from an analyst's viewpoint.

COPPER

For the first twenty years of this century, the United States was an exporter of copper on balance. Even through most of the '20's this position, though reduced, was still held. The next decade, however, showed a bare self-sufficiency, and from 1940 to date we have been a consistent importer of the red metal, our domestic production being insufficient to take care of war, postwar, or garrison state demands. The changed status is spelled out in Table 1, which, on the basis of the figures used, indicates that the United States had an average annual excess of nearly 100,000 tons of copper production and in recent years of peak employment has shown an average deficiency of nearly 500,000 tons, the latter equivalent to some 28% of our needs.

VARIATIONS MIGHT BE OBTAINED

Some variation from these results might be obtained, based on the components selected from the different series of available copper statistics. However, the general conclusion of continued dependency on imported ore and metal is inescapable. Conversely, this provides a partial cushion through tariff protection to domestic producers from any falling off from present abnormal levels of demand. This cushion is probably deeper than the 1951 figures alone indicate, as the limited availability of copper from all sources (foreign, domestic, and secondary recovery from old scrap) retarded consumption last year.

The question of where the supply is coming from is less important than whether copper from all sources will be sufficient to take care of foreseeable domestic demand. Last year's domestic copper shortage, in terms of military requirements superimposed on a high level of civilian activity, was real. That this will be a permanent state of affairs, as assumed by several Washington authorities, is debatable. The industry feels strongly that current campaigns to compel or induce substitution of other metals, notably aluminum, for copper are based on erroneous appraisals of long-range supply-demand relationships and on the supposition that current strict controls, depriving the country of the benefit of the operations of free markets, will be forever continued.

WORLD DEMAND ABNORMAL

The world demand for copper in 1951 was patently abnormal. All markets were strongly affected by the U. S. rearmament and stockpile program, and the domestic market was further disorganized by superimposed price and material controls. World prices reached a high of 60 cents per pound as against a 24½-cent ceiling for domestic copper and 27½ cents on imported copper. The natural attrac-

Table 1

Thousands of Short Tons

Annual Averages	Apparent Consumption*	Smelter Production from Domestic Ores	Recovery from Old Scrap	Total Smelter and Old Scrap Recovery	Apparent	
					Excess	Deficiency
1926-30	1,125	825	358	1,223	98	
1936-40	1,032	726	336	1,062	30	
1941-45	1,978	978	444	1,431		547
1946-50	1,736	795	455	1,250		486
1951	1,797	931	494	1,425		496

*Based on U. S. Bureau of Mines withdrawals of new refined copper for domestic account after certain adjustments plus secondary recovery of old scrap.

tion of foreign copper to the higher markets decreased domestic production of refinery copper from foreign ores and lessened refined metal imports. Domestic scrap dealers withheld supplies in anticipation of higher prices, thereby adding to the tight supply picture.

IMPROVEMENT IN DOMESTIC SUPPLY

There are sound reasons for anticipating steady improvement in domestic copper supply. In the United States, seven new ore bodies are to be developed between now and 1955, adding some 250,000 tons, or 26%, to domestic production. The Revenue Act of 1951 made certain provisions offering relief and incentive to the mining industry, including a provision that permits deduction from income of expenditures made in the development of a mine. Suspension of import duties until February 15, 1953, or unless prices reach a "peril point," will provide incentive to foreign producers to ship to the U. S. market, particularly if world metal prices continue the softening trend in evidence since the latter part of 1951. Relaxation of the world scramble for the metal and increased foreign production from the other principal producing areas (namely, Chile, Northern Rhodesia, Canada, and the Belgian Congo) could add another 131,000 tons to domestic supply, simply by a return of domestic refinery production from foreign ores and of net refined imports to the 1950 level. Total supplies available for domestic consumption (exclusive of changes in stocks on hand or in the volume of scrap recovery) might well reach 2,177,000 tons by 1955, compared with 1,806,000 tons last year, or the rate of 26 pounds per capita versus 24 pounds in 1951. It might be pointed out that the former is about 3 pounds above the average consumption level for the five years 1946–50, which is generally recognized as a major boom period in our history, and 6 pounds above 1940. It could be concluded, therefore, that, under anything like ordinary conditions, the United States will not be pinched for copper, but rather the industry will be actively competing for markets. Even should abnormal conditions continue, the steps taken should bring balance into the world copper picture by the middle '50's.

BEST MATERIAL FOR MANY USES

As for the outlook for the metal, for many uses copper is the best material found to date. Some of the substitutions now being made will prove temporary. Others, reflecting the overcoming of initial inertia to use of a new material, will be continued. A few of the rumored diversions would represent a sobering inroad into traditional copper markets unless checked. The checking process can be accomplished in three ways: (1) by increased world copper production, as has been mentioned, (2) by a narrowing of the price differentials, particularly between copper and aluminum, and (3) by a falling off of extraordinary demands. Stabilizing influences in the domestic market are the stretching out of the military program; the stockpile deficiency; and the accumulating backlog arising from the current heavy diversion from normal civilian channels.

THREE COMPANIES IN CONTROL

Turning to the components of the industry, we find that three companies (Kennecott, Anaconda, and Phelps-Dodge) control the greater part of the country's known domestic reserves, of refined output, and a sizable percentage of known foreign reserves. A substantial part of their output goes to fabricating affiliates, and the same three companies are estimated to control 65% of the country's brass and wire mill facilities.

At this point the analyst might well ask: Why look any further in selecting representation in this field? It is not that easy. Besides the factors just mentioned, consideration must also be given to production trends, new discoveries, location and development of reserves, type of mining, quality of ore, relative activity as a smelter, other production, investments, and the usual statistical factors, to determine relative market worth of the equity in question.

MAJOR CHANGES IN PRODUCTION FIGURES

To illustrate, so far as copper production alone is concerned, there have been major changes in the domestic and foreign production figures of individual companies. These tend to be lost in the dollar sales figures, particularly during a period of rising prices or in the case of companies with varied activities. In comparison with 1937 the 1950 domestic copper production figures of Phelps-Dodge showed a gain of nearly 56%, Kennecott a gain of 40%, and Anaconda a decrease of 64%. On a combined domestic and foreign production basis, Kennecott showed a gain of 26% over 1937 and Anaconda a decrease of 27%. Of the leading foreign producers, Mufulira was up 81%, Katanga 17%, Noranda (including custom ores) 67%, and International Nickel was down 29%.

ANACONDA LARGE PRODUCER OF SILVER

On the other hand, Anaconda, in addition to ranking second as a world copper supplier, is the second largest producer of silver in the world and is now venturing into the production of aluminum ingots. International Nickel is better known as the only important producer of nickel than as the world's fifth largest copper company. Kennecott, the leading copper producer, also extracts substantial quantities of molybdenite, zinc, and, in terms of dollar sales, a fairly sizable amount of gold and silver. It owns two thirds of Quebec Iron & Titanium Corporation, which last year began production of iron and titanium slag, the latter to be used initially in the manufacture of pigment (titanium dioxide) and potentially in the production of titanium metal. The largest smelter and refiner of nonferrous metals and scrap, American Smelting & Refining Company has worldwide interests. American Metal Company, largely a custom smelter and refiner of ore, has substantial investment holdings, particularly in African copper mines, and expects to start potash operations by the end of 1952.

COPPER EQUITIES BEHAVED SATISFACTORILY

Marketwise, copper equities have behaved as satisfactorily as could be desired from the lows of mid-1949 through the end of 1951, moving steadily upward and even outperforming the general market in the fourth quarter of last year. Individual gains over the two-and-a-half-year period ranged from 75% to nearly 500% for the more speculative issues, while the shares of the three leading companies recorded an average increase of 126%. Thus far in 1952 the reverse has been true. Copper stocks, along with other nonferrous metal commons, have been subject to substantial realizing. The leading equities have lost from slightly more than one quarter of the preceding two-and-a-half-year gain and the more speculative issues up to 50%, while the general market is still close to its highs. This setback reflects a number of influences such as the Moscow peace offensive, the Korean truce negotiations, the stretching out of our defense program, and the possibility of some reduction of earnings from higher costs. The fact that revenues and profits of copper producers and other nonferrous companies ordinarily are highly cyclical has undoubtedly contributed to investor profit taking. Like many market movements, they have a tendency to go to excess, and in this instance the extent of the decline does not appear consistent with the volume of business and profits likely to be reported for 1952, excepting possibly that of some of the companies with heavy foreign production and dependent on markets outside the United States. Any further setback in the market prices of domestic copper shares in our opinion would provide an opportunity to acquire representation in strongly situated companies with good earning power, high yields, large and even excess working capital, and in many instances little or no debt.

LEAD

The United States relies on three principal sources for its lead: production from domestic mines, secondary production (new and old scrap), and net imports (imports less exports). Over the years major shifts have occurred in the relative contribution of these three sources, a process that was accelerated by the demands of World War II and the lack of any important new lead discoveries within the country as an offset to long-term depletion. On a tonnage basis domestic mine production of lead postwar averaged but 61% of that reported over the 1926–30 period. In the face of nearly a 35% interim gain in estimated consumption, the industry has had to place increased reliance on secondary recovery and on imports. Seondary recovery in terms of volume has now become the most important source of lead in the United States, exceeding domestic mine production by a substantial figure. Whereas in the earlier period the United States exported substantial quantities of lead, over the past decade these have dwindled to a mere trickle and imports have risen sharply. To sum up the relative contributions to net available supply, domestic mine production since the late '20's has decreased from 66 to 34%, secondary recovery (new and old scrap) has increased from roughly 30 to 44%, and net imports have gained from 4 to 22%. The last figure is low, owing to the decreased flow of foreign lead to the United States last year. An average of 28% of net available supply as shown for 1946–50 is probably a better measurement of relative foreign dependency.

AVAILABLE SUPPLY ADEQUATE

On the other hand, the net available supply of lead from all sources, except for brief periods, has been fully adequate to meet domestic needs. This is shown in Table 2, which compares estimated consumption with net available supply on the basis of five-year averages. Part of the excess of supply over consumption undoubtedly can be traced in part to duplication in the figures for secondary recovery, but in the main it illustrates the over-all balance that fundamentally prevails in the domestic lead picture.

Table 2
Thousands of Short Tons

Annual Averages	Estimated Consumption	Production from Domestic Mines	Secondary Production	Net Imports*	Net Available Supply
1926–30	878	636	286	45	967
1936–40	661	416	253	63	732
1941–45	1,075	444	351	356	1,151
1946–50	1,092	390	460	331	1,181
1951	1,182	390	498	248	1,136

*Imports less exports.

Table 3. Production of Zinc as Metal
Thousands of Short Tons

Annual Averages	From Domestic Ore	From Foreign Ore	Total Primary	Total Secondary Distilled	Total Slab Zinc Production	Imports	Exports
1926-30	576	11	587	43	630	..	29
1936-40	512	23	535	45	580	21	18
1941-45	584	274	858	52	910	58	70
1946-50	537	258	795	58	853	111	58
1951	605*	281*	886	46	932	88	27

*Estimated.

SUBJECTED TO SEVERE DISLOCATIONS

This industry in 1951, like copper, was subjected to severe dislocations from the Government buying program and imposition of controls established by the amended Defense Production Act of 1950. Though total world supply was believed in balance with actual world consumption, the effect of governmental policies and speculative foreign buying resulted in world lead prices reaching a high of 35 cents per pound as against a 19-cent-per-pound domestic selling price. The result was an artificial shortage in domestic markets, as foreign production flowed to those markets willing to pay the higher premiums.

PRICE WEAKNESS IN INTERNATIONAL MARKETS

Lead was the earliest of the nonferrous metals to show price weakness in international markets. Heavy accumulation had resulted in excess lead stocks in European markets, and in late fall foreign prices began to show weakness and have now reached the U. S. price of 19 cents per pound. As an aftermath, foreign lead is now beginning to appear in quantity in the domestic market. This was heralded by an initial purchase of 30,000 tons from the British Government for the U. S. stockpile, with additional purchases intimated. An added stimulus for increased imports of foreign metal is the current elimination of the tariff above 18 cents per pound. Further indication of the easing in the lead picture was the recent removal of controls from the use of lead in the production of tetraethyl lead gasoline.

OWN PARTICULAR USES

Lead also has its own particular uses for which no satisfactory substitute has been found to date. The principal outlet is storage batteries, which in 1951 accounted for approximately 32% of total domestic consumption of 1,182,000 tons. Other major markets for lead are pigments, cable coverings, and tetraethyl lead. These four uses combined accounted for about 65% of total lead consumption in 1951.

GOVERNMENT'S EXPANSION GOAL

The Government's expansion goal for lead—including domestic production of ore, scrap recovery, and imports—is to provide an annual supply of 1,342,000 short tons by 1955, and thus far Federal assistance has been given for about 47,000 tons of additional lead production annually. By 1955 U. S. mine production is expected to total 417,000 tons of lead a year including new mine output, scrap production is expected to be around 430,000 tons, and imports will account for an additional 420,000 tons. This makes a total supply of 1,267,000 tons, which according to the Defense Production Administration is 75,000 tons short of the anticipated need. However, net imports in 1950 were nearly 100,000 tons greater than DPA's 1955 projection, and scrap generation in the past two years apparently has been greater than the 1955 estimate, so that the anticipated deficiency may well turn out to be a surplus. Again outside of major conflict, no real stringencies seem likely to develop for this metal in the near future.

FEWER CONPANIES WITH SECURITIES OUTSTANDING

There are considerably fewer lead companies with securities outstanding than is in the case of the copper industry. Even some of the so-called lead companies cannot be classified solely as lead producers. For example, St. Joseph Lead Company, the second largest producer, in the past two years has shown more gross earnings from zinc than from lead, and it includes 195,000 shares of New Jersey Zinc among its investments. Consolidated Mining & Smelting Company, reputedly the largest and lowest-cost lead-zinc producer in the world, is also the leading silver miner, and in addition produces gold and other metals and ranks as a major fertilizer producer in Canada. Market-wise, lead company common stocks have also been subjected to heavy profit taking, which in individual instances seems overdone, despite the probability of lower earnings this year.

ZINC

The supply-demand story of zinc is similar in many respects to that of the other heavier nonferrous metals. For many years the American zinc industry, was self-sufficient, and, except for extraordinary conditions, imports and exports were at a minimum. In fact, it was not until World War II that our net export position could be said to have been really terminated, and there have been occasional periods since then when a favorable zinc balance has been restored. Subsequent dependence on imports has been less a measure of progressive depletion of reserves than of an expanding level of consumption of the metal. Table 3 shows changes in domestic sources of supply averaged by five-year periods and in this instance based on the production of zinc as metal only.

RESTORATION OF FORMER RELATIONSHIPS

The restoration of former relationships between domestic and foreign markets should largely, if not entirely, end the present shortage of slab zinc. The total world zinc supply is believed approximately in balance with total world consumption, and the industry believes that there is no need to fear any shortage of zinc in a free market responsive to the laws of supply and demand. Neither does the industry believe that the long-range outlook for zinc is discouraging or that ore reserves in this country or in the world will be dangerously diminished or exhausted in the foreseeable future. At a meeting of the Institute of Metals held in London on October 17, 1951, world reserves were estimated to have increased from 43 million metric tons in 1940 to 70 million tons in 1948. Measured reserves between these periods have increased substantially, despite an accelerated rate of production. Improved operating techniques and practices in mining, milling, and smelting are providing greater yields of contained metals in the ores, and the industry points out that there are still substantial mineralized areas on this continent remaining to be explored by modern methods.

CONSUMPTION OF ZINC SLAB

Consumption of slab zinc in the United States for the ten-year period 1941–50 averaged 820,000 tons. With increased flow of foreign concentrates to U. S. smelters, it has been estimated that domestic slab zinc production in 1952 will surpass 1 million tons, as against an all-time peak reached in 1943 of 990,000 tons. The most important outlet for slab zinc is its use in galvanizing. It is "by far the best protective metallic coating for the rustproofing of iron and steel." Zinc alloy die casting, the second largest market for zinc, is finding increasing acceptance and application. The largest mine producer of zinc is Consolidated Mining and Smelting Company, with New Jersey Zinc second, followed by Anaconda Copper Mining and St. Joseph Lead. Other companies such as American Metal, American Smelting and Refining, Eagle Picher, and American Zinc are active in the field, with operations concentrated largely on smelting. New Jersey Zinc is also a partner with Kennecott in the production of iron and titanium slag through the Quebec Iron & Titanium Corporation previously mentioned. Market-wise, the common stocks of zinc companies also have given up considerable ground during the first four months and should begin to attract investor attention.

SUMMARY

In summary, the following conclusions might be reached regarding the heavier nonferrous metals;

1. The 1951 shortages were real, but were also exaggerated in that normal laws of supply and demand were upset by Governmental purchase programs and price controls.
2. The present distortions are rapidly being corrected as a result of overaccumulation of stocks by foreign countries and increased problems of exchange.
3. The decline in world prices, in addition to loosening up foreign supplies for American markets, is also freeing domestic scrap which had been withheld in hopes of high prices.
4. The world supply picture for copper, lead, and zinc is fundamentally sufficient to take care of U. S. domestic requirements, and even abnormal requirements should be met by 1955.
5. The common shares of many of the leading nonferrous companies in losing from 30 to 60% of their maximum gain from 1949 lows would appear to have, in a number of instances, excessively discounted the 1952 earnings outlook and can again be selectively accumulated for long-term holding.

PROFIT POSSIBILITIES LIMITED

As for fissionable materials, the profit possibilities in this field, initially at least, seem likely to be limited by a number of factors. These include the handling problems connected with radioactive technicians, and the maintenance of close controls. The actively licensed companies in the field are becoming special equipment designers and manufacturers serving a highly technical market. These companies also have a common characteristic in that they are richly endowed with scientific talent but are short of managerial skill. For these reasons, until one or two companies begin to emerge clearly as profitable enterprises, investment participation in this probably need not be hurried.

CHAMPION OF ALUMINUM

As for aluminum, as some of you know, I am one of its most ardent champions. Though in common with other industries it is not immune to depression, its aggressive development of new markets, the over-all appeal of the metal, and the firm backlog of Government purchase contracts for five years' production of the new facilities provide strong cushionary and recuperative power. Through rapid amortization permitted for tax purposes on 80 to 85% on the cost of construction in the United States and through extra capital cost allowances in Canada, and through retained earnings, the four North American producers will be able to extinguish the additional debt incurred in the construction of the new facilities and at the same time add substantially to working capital.

$1 BILLION WORTH OF FACILITIES

The fact that over $1 billion worth of facilities will, in effect, have been provided through depreciation and retained earnings over the next several years should not be lost sight of by investors, but should be given full consideration in the appraisal of the value of aluminum shares. For example, Aluminum Limited in 1951 reported earnings per common share of $7.03, deducting prior thereto the equivalent of $6.74 per common share in depreciation charges, which in turn was stepped up by $3.25 per share from the year previous. For the long-term investor willing to forego current additional income, and understanding the current flattening effect of these capital cost allowances on earnings, common stocks of the aluminum companies provide outstanding attraction as long-term commitments at current levels. *(Applause)*

* * *

Chairman Goff: Thank you very much. The meeting is adjourned.

Banking

TUESDAY MORNING

MAY 6, 1952

George Shimmon

At the banking forum *(left to right):* Chairman George R. Berkaw standing with George Geyer, Paul B. Kelly, and W. J. Braunschweiger, speakers at the forum

GEORGE R. BERKAW, The Detroit Bank, Detroit, presiding.

Chairman Berkaw: I want to welcome you all to our banking forum this morning. The Convention committee has secured for us three outstanding speakers who will lead our discussion on banking. As the structure of our business society has become more complex, banking has also grown more important. Banking to some of us means one thing and to others something else. To some of us it might mean a place to put our excess funds and to others a livelihood. Services are the thing that still others of us think about in connection with banking. These services have become so integrated with our everyday life that many of us take them for granted. One of these interesting services I should like to comment on this morning: that of providing the medium which facilitates the complexity of many business transactions each day. The banks of the country are the redepositories of approximately $160 billion, and through the use of mere slips of paper it is possible to transfer huge sums very easily from one person or corporation to another, wherever they happen to be located. In fact, when speed is vital, the extensive wire system of the country is utilized to effect these transfers in minutes rather than days.

TOTAL DEBITS CLEARED $1½ TRILLION

In 1951 the total of all debits cleared by the banks in just the principal cities of the United States amounted to over $1½ trillion. Here is one yearly financial statistic that exceeds our Government debt! In addition, of course, the banking system plays an important part in a field that you are all very fully aware of: namely, loans of all types, indirect loans made through the investment route also. On the West Coast the Bank of America has been a most important factor in the development of the economy, so much so that it is now the largest bank in the United States.

Our first speaker this morning is Mr. Walter J. Braunschweiger, the executive vice-president of this bank, chairman of its trust investment committee for southern California, and a member of the senior managing committees. He is very active in many of the banking associations throughout the country and has also taken an active part in local civic affairs. It is with a great deal of pleasure that I present Mr. Braunschweiger, who will lead the discussion on "West Coast Banking Opportunities." We have also asked him to comment more specifically about the operations of his own bank about which we are all, I think, very eager to hear. Mr. Braunschweiger. *(Applause)*

* * *

Walter J. Braunschweiger: Mr. Chairman, ladies and gentlemen, it is a real pleasure for me to be here this morning and talk to you on a subject that is of great interest to all of us, especially here on the Pacific Coast.

In preparing some facts and figures for me to use this morning, the statistician in our organization, in a joking vein, of course, approached me and said he had discovered something about California that was not first. He had been checking the number of people in our mental institutions, and he discovered that California, in this case, was number four and that New York was first. *(Laughter)* Then he thought he would look back to find out what had taken place in the last fifteen years and he found that in the past both New York and California had a smaller percentage admitted to these institutions. The thought came to him, "Let's check some other place and see what the trend is." And he discovered the fact that, of all the areas in the country, the greatest increase was in Washington, D. C. Now, that isn't the astounding fact, as he put it; the astounding fact was that the percentage was not even greater. So there is one place that California cannot be number one. *(Laughter and applause)*

CHANGE IN PACIFIC COAST ECONOMY

I have prepared my remarks in two sections. First, I would like to tell you about the great change in the economy here on the Pacific Coast and how that change has affected the growth and the earnings of the banking institutions here. In the old days California was dependent primarily on agriculture, livestock, minerals, citrus fruit, the motion picture industry, and tourist trade, and, in turn, the income from those various activities was spent by the people here to buy manufactured goods in the East.

I would like to quote this one fact: from 1865 until

1940, a period of seventy-five years, the people in California accumulated $4,300 million in bank deposits, and in six short years, from 1940 to 1946, they added $8½ billion. I think that is a rather interesting comparison. Now, during that same period of time, great changes have taken place in our industrial development. Our growth in population, the influx of capital, and the development of diversified industries have resulted in a much larger and better balanced economy than we had formerly.

FACTORS RESPONSIBLE FOR CHANGE

I should like to mention several of the important factors that are responsible for this change and great growth of business and then speak of them more in detail. Second, I should like to show how this great growth has made it possible for the banking institutions located in the area to grow also and show substantial profits.

1. Agriculture has always been, and will continue to be, our most important source of income.
2. Equally important is our growth in population. The importance of the phenomenal growth of the states on the Pacific Coast cannot be overemphasized.
3. The industrial development, which got under way in the 1930's, and was greatly expanded with defense contracts in the war years, brought about a rapid growth in the steel industry. The expansion of this industry has given us a greater diversification and a much firmer industrial base.
4. Foreign trade showed an increase in 1951 over 1950, which indicates a growing influence in this area of business with foreign countries, especially with those in the Pacific area.
5. The large increase in population requires more roads, freeways, municipal buildings, schools, hospitals, and many other facilities. The actual building and the maintenance of each of these become a permanent part of our industrial structure and create many permanent jobs.

AGRICULTURE

For the past two years, the value of farm production in California has exceeded the total of that of any other state in the Nation, Iowa being second and Illinois third. The total cash receipts from marketings of California farm products have increased from $881 million in 1941 to $2,574 million in 1951. One of the outstanding increases in cash crops is cotton, receipts from which amounted to $40 million in 1940. This year's crop, together with its by-products, is estimated at $406 million.

Of course, increased prices have had some effect, but primarily the additional acreage added to our farmlands has been very important. In 1939 we had 5,059,000 acres of developed, irrigated land, whereas in 1949 we had 6,618,000, an increase of more than 1½ million acres. The investment in irrigation works and water rights amounted to $318 million in 1939 and now stands at $640 million. The average cost of water per acre is $10, while in Arizona it is $15 and in Texas $7. A total of 33% of all irrigated land in the 11 western states is located in California.

I presume some of you from the East have the question in mind: "How about your water supply?" We believe that we have an ample supply for our fast-growing population. In southern California, it is estimated that the present supply from the Colorado River and from the Owens Valley is sufficient to take care of a population of 10 million people. That would mean that we have a water supply sufficient for the fondest hopes of our growth to 1965. When that time comes, and we have to have a greater supply, all the bonds of the Metropolitan water district will have been paid off, and, if it is necessary to have an aquaduct from northern California to bring water to the South to keep our agriculture lands moving, that will come about, and the increased population, I am sure, will be able to afford such an expensive system. True, it will be more expensive than the Colorado River aquaduct, but we believe it can be financed and be made a success.

AGRICULTURAL PRODUCTS SOLD OUTSIDE STATE

A substantial part of our agricultural products is sold outside of the state, bringing in a cash return. Practically all of the cotton goes to mills in the East and South or is shipped abroad. California produces 90% of the Nation's total of wine, and more than 70% of California wine is consumed outside of the state. Between 82 and 90% of the fresh citrus fruits and their by-products are sold outside of California. Few people realize that our fish-canning industry exceeds that of the New England States in dollar volume. More than 80% of this pack is sold outside of California.

SECOND IN MANUFACTURING ESTABLISHMENTS

California now ranks second in the Nation in the number of manufacturing establishments and sixth in the Nation in terms of value added by manufacture. From 1937 to 1947—the latest figures available—gross business income increased from $15 billion to $47 billion.

During the period 1940 to 1946, when our population had an increase of 50%, people were not able to buy the things they wanted to use for better living. After the war, in 1946, national concerns began surveying the opportunities here on the Coast, and they discovered that, instead of 7% as they thought, they were now selling between 13 and 15% of their national products on the Pacific Coast. They had outgrown their facilities in the East. The question was: "Shall we make additions to our factories in Cleveland, Detroit, or New York, or shall we go to the Pacific Coast?" Considering freight rates, and the other advantages, our climate, our supply of labor that was available, hundreds of thousands working in the shipyards and aircraft plants which were available for this new manufacturing effort, these concerns came out to California and built plants.

PHENOMENAL WAR AND POSTWAR DEVELOPMENT

The phenomenal war and postwar development of our manufacturing has caught the eye of the Nation. Since 1945, and through 1951, more than $2 billion has been invested in 9,500 new manufacturing plants or major plant expansions. It is estimated that approximately 70% were financed by new money coming into the state, earned by corporations and individuals elsewhere and used here to buy land and build plants and machinery. During the period 1940 to 1951 the number of manufacturing establishments here increased 78%; the number of manufacturing workers 117%, or 23% from 1946 to 1951, and the value added by manufacturing increased 356% between the years of 1939 and 1950.

239 TYPES OF MANUFACTURING

The Bureau of the Census has a standard industrial classification which includes 452 types of manufacturing. California has 239 categories and ranks second in number to New York State which has 316. The state of Missouri is third with 164.

This diversification of industry is very important in the establishment of a firm industrial base. Plant expansion appears to be continuing, as in 1950 there were 1,122 new plants or expansions, with a total cost of $256 million, established, and in 1951 there were 1,177, with an investment of $533 million.

The president of the Southern Pacific Railroad, a few weeks ago, made the statement that since 1946 one new manufacturing plant has been established on the Southern Pacific lines every day. It is very hard to conceive of such an industrial growth in so short a period of time. Our manufactured products now amount to about $4 billion, that is, exclusive of the aircraft industry.

DEFENSE PROGRAM

Speaking of industrial development, we cannot overlook the defense program. The Munitions Board recently indicated that from July 1950 through December 1951 contracts awarded to California amounted to slightly over $6 billion. This was equal to 14% of the Nation's total, and was only exceeded by New York with 18% and Michigan with 8%. At the present time 27% of all the people employed in manufacturing in southern California are employed in the aircraft industry. This might appear to be a serious problem for us, but from past experience we don't think it will be. The continued increase in our population has necessitated the expansion of other industries, and, when the time comes that the aircraft industry will return to normal, the employees released by them will in all probability be absorbed by other industries, as happened in 1946 and 1947.

MINERAL PRODUCTION

California has had a substantial increase in its mineral production since 1940—a 213% increase. The gross revenue from the oil industry has increased from $207 million in 1940 to $708 million in 1950.

TOURIST BUSINESS

Another source of income—"new money"—is our tourist business. In southern California alone, approximately one-half billion dollars a year of new money is brought to us by our fine tourist industry. For the travel year ended August 1951 a total of 3,068,000 visitors spent $473 million, an increase of 12% over the previous year. The construction industry here on the Pacific Coast is also an important factor, and in 1951 California accounted for approximately 11% of all new construction in the Nation and 15% of all new homes.

Another source of new money for the West Coast is the major expenditure made by the Government. This is one of the few sections of the country in which Federal expenditures exceed the revenue taken out by the Government in taxes. However, we are hopeful that the day will soon come when this expenditure can be materially reduced. Federal tax collections in California for the year 1951 amounted to $4,027,536,759, compared to $2,820,132,012 in 1950.

AMAZING GROWTH IN POPULATION

Not to be overlooked is the amazing growth in California's population, which increased more than 53% between 1940 and 1950. California's present 11,250,000 population places us second among the states of the Nation. It is significant that people who have come to the state in recent years are younger, and the older ones who come bring their savings and investments, thus adding to our financial resources. California's personal income has increased 231% in the 1940–50 period and is second only to that of the state of New York. One fact should be emphasized and that is that, on a per capital basis, we are 21% above the average throughout the Nation. Retail sales in the state have increased 281% in this period, compared to a national increase of 230%. Our per capita retail sales are 22% higher than the national per capita average.

BANKING

The unprecedented growth in California's population, financial resources, and economy is reflected in the growth of the state's banking institutions. California's total bank deposits have increased from $4.7 billion in 1940 to $14 billion in June 1951. Indicative of the significance of this growth is the fact that the member banks of the San Francisco Federal Reserve district's share of the Nation's deposits *increased* in the past decade from 9.6 to 13.4%, while the member banks in the New York district's share was being reduced from approximately 36.8 to 26.6%.

STATEWIDE BRANCH SYSTEMS

Banks in the western states are fortunate in that they are privileged to have statewide branch banking systems, and California banks are especially fortunate in that our laws permit banks to offer a combined service to the public of commercial, savings, and trust activities, permitting the greatest possible tie-in to the various phases of the growth and development of the area.

More people do business with banks in California, on the average, than nationally. A few years ago the Reserve City Bankers Association made a Nation-wide survey which showed that nationally 80% of the people patronized banks in some manner. A public opinion survey made by us a year ago showed that 96% of the people in California patronize banks. In addition, the people in California make nearly 50% greater use of banking facilities than in the Nation as a whole. The reason for this is the varied services offered by the banks, and especially by the branch banking systems.

Our current census shows that California has about 7% of the Nation's population and 7% of the number of employed persons in the Nation. However, California banks have 10% of all of the bank accounts in the country. A total of 30% of the adult California population have both checking and savings accounts, compared to 20% for the Nation. This means that, in actual deposit accounts, half again as many Californians have checking and savings accounts compared to the Nation's average.

Although the population of our state has increased from 6.9 million to 11 million from 1940 to 1951, and the bank deposits have increased from 4.3 billion to 14 billion, yet the number of banking offices in the state has only increased slightly over 10%, from 1,074 to approximately 1,200. So today we find ourselves with one banking office for each 9,000 people, whereas in 1940 we had one banking office for every 6,400 people. Banks in the West, and especially branch banks, strive to maintain a more friendly and informal atmosphere than is generally true throughout the country, bringing banking to the people and encouraging them to feel at home in banks.

RATIO OF EARNINGS TO CAPITAL FUNDS

The ratio of earnings to capital funds in the West has been considerably higher than that of the country as a whole. The reasons for this are numerous: diversification of loans, as to both area and classification, which reduces risks; ability to loan in the smaller communities where funds are needed and where interest rates are more favorable; supplying to a large group of branches expert advice on credits, management, and other matters, at a minimum cost.

EARNINGS FROM NUMEROUS SOURCES

The banks on the Pacific Coast, and especially in California, can derive their earnings from the numerous sources. They happen to have been the first banks in the country to reach the conclusion that, if they were to lend their funds successfully, they would have to make them available to the average man. Therefore, the turnover of our loanable funds is much more rapid than elsewhere in the country. Our banks loan money to the farmer to plant his crop and to harvest it and to packers to can fruit and vegetables. We loan money to the wholesaler to warehouse his goods and distribute them, and we loan money in the manufactured goods end of it. We loan to the manufacturers to make their stoves, refrigerators, and automobiles, and the hundreds of other items; and then we finance the wholesaler and the distributor; and, in the retail field, we finance the consumer.

So there is a tremendous turnover of workable funds at the banks in this area. As suggested by your chairman, I was asked to make definite references to the Bank of America to give you some indication of the turnover of funds among banks. Last year the Bank of America made loans totaling $5,400 million. We collected loans of $5,200 million and increased our loan portfolio about $200 million. Our commercial portfolio is a little more than $1 billion. Our consumer loans are about $800 million. Our savings deposits are about $1½ billion.

In order for us to maintain that loan portfolio, it is necessary to loan between $125 and $150 million a month to take care of the payments that are made on the consumer loans, to say nothing about the commercial loans. There is a tremendous turnover in activity. Then, too, through the branch banking system, we are able to loan in the communities where the funds in that particular community are needed and where interest rates are more favorable. There are 65 branches in our system of 528 branches where the loanable deposits are less than the loans in that area.

The funds from the metropolitan areas are used in those smaller communities to help build those communities, and, in turn, we benefit by it because smaller loans in the smaller communities enjoy a higher rate of interest. So the over-all interest basis of our commercial portfolio is just slightly under 4%. Our installment loans are better than 8%, and our real estate loans are slightly under 4½% with an aggregate return on our entire loaning portfolio of 5.007%.

The other important factor in the banking field is that, when you make loans, you are able to collect them, and then your loss ratio is at a minimum. Generally speaking, in any substantial way, the consumer loan, the so-called "time plan" loans, in our institution, got under way in 1935. Since that time we have loaned, retail and wholesale, more than $10 billion to 11 million borrowers, and the loss ratio on that entire amount has been 17/100 of 1%.

SALARIES IMPORTANT FACTOR

Salaries have been an important factor in the operating costs of banks. A recent report of the Third Federal Reserve District, Philadelphia, showed that salaries and wages of all banks in that district were 30.2% of the operating earnings, and in the larger banks it amounted to 33%. Figures for all member banks in the Twelfth Federal Reserve District are approximately the same. However, if the Bank of America figures were eliminated from this average, the average would be considerably higher, as the percentage of our salaries and wages to total income dollars is 26%—substantially lower than the afore-mentioned average.

This is brought about by a much larger income on earnings assets and by the fact that well-trained, experienced, and high-salaried officers, both in credits and in operations, are available to give advice and guidance to a large number of branches, and second, a substantial volume of business in many of these branches, such as the details of handling of mortgage loans and the granting of personal and time plan loans, can be successfully handled by junior officers.

ACTIVE TRUST DEPARTMENT

Then, of course, we have a very active trust department with very substantial earnings, and also here on the Pacific Coast the foreign business had grown very rapidly.

To give you some comparison along that line, the foreign department has increased since 1946 from 60 to 1,000 employees, and the foreign department supplies about $6 million of our gross earnings. So that is a very important factor. More people do business with banks on the Pacific Coast than elsewhere in the country.

The Reserve City Bankers Association made a survey a few years ago, and it showed that 88% of the adult population did some business with banks. A survey we made by a public opinion poll recently showed that 96% of the adult population did business with banks. We are very much interested in the fact that the investment public in the past few years has become actively interested in West Coast banks. Perhaps many of you saw an item in the *American Banker* recently in which 20 of the largest banks had a comparison of their earning assets to capital stock. The inference in the article was that the bank stock with the greatest amount of assets per dollar was the most desirable stock. It quoted one bank as having more than $12 for every dollar of capital investment. At the Bank of America, our working assets are $8.56 per dollar of stock. The bank that had $12 simply did not have the ability to serve an area as dynamic as this area. It only earned 55/100 per dollar, while the earnings in our institution were nearly 95/100.

The press recently announced that the total earnings of all national banks in the Nation for 1951 were slightly more than $500 million. This was 7.46% on the capital funds of these banks. If the Bank of America's earnings of $50 million are eliminated from this figure, the earning percentage of all other national banks would be 7.14% on their capital funds. I do not have the comparable figures for all national banks in California or the Pacific States, but I do have comparable figures for the member banks of the Twelfth Federal Reserve District which demonstrate my point.

The total earnings of all banks in the Twelfth Federal Reserve District for 1951 show 10.14% on their capital funds. If the Bank of America is eliminated from this computation, the average of all other banks in the district would be 8.88%, which you will see is approximately 25% greater than all national banks in the country, excluding Bank of America, and, if you include Bank of America's earnings, the average earnings of western banks would be nearly 40% greater than the average of all national banks throughout the country.

KEEN COMPETITION

The keen competition among banks on the Pacific Coast has aided in the growth and development of the banking institutions. Again, the reason for that is the branch banking system under which we are privileged to operate, the ability to loan funds to the public. There is no section in the country where banking is keener and more competitive than right here. It places all the banks on their toes to go out and get business. We believe the banking structure here on the Coast is very sound and that the banks will continue to grow and earn money in proportion to the amount and kind of service we are willing to render the people. *(Applause)*

* * *

Chairman Berkaw: Thank you very much, Mr. Braunschweiger for a most informative and interesting talk.

We are now going to hear about the outlook for bank stocks generally. Over the years banks have continued to appeal to investors as attractive media of investment, although the degree of attraction has greatly varied during the different periods. As of the end of 1951 it is interesting to know that the total of the capital accounts of all banks in the United States totaled over $14,700 million.

Our second speaker this morning is Mr. George Geyer, president of Geyer & Company. He has been active in the securities business since 1928 and for the last eighteen years has specialized in bank and insurance stocks. He is a member of the New York Society of Security Analysts and also a member of the board of governors in the National Association of Security Dealers. It is with a great deal of pleasure that I present Mr. Geyer. *(Applause)*

* * *

George Geyer: Mr. Chairman, ladies and gentlemen, "The Outlook for Bank Stocks," I am afraid, would be a tiresome topic today, were it not for a single influence—a prospective development that I consider of such overriding importance as to absolutely dwarf other factors commonly inherent in bank stock appraisals.

COMMERCIAL LOANS

Commercial loans of the weekly reporting member banks in New York City during the first quarter of this year averaged 19% above the first quarter of last year, and the average interest rate of 3.17% charged on business loans by leading New York City banks during the first half of March was nearly 50 basis points above the average rate charged in the first half of March last year. The combination of larger loans and higher interest rates produced an improvement averaging 15% in the net operating earnings of a dozen large representative New York City banks in the first quarter of this year, compared with the same period last year.

But comparison of quarterly results with year-ago figures seems likely to be far less impressive throughout the remainder of this year. Commercial loans in the early weeks of this year were running up to 24% above the year-ago periods, but in recent weeks the gain over last year has declined to about 15%. Between April 1 of last year and the end of the year commercial loans of the weekly reporting member banks in New York City rose nearly $1.1 billion or 16%, but I do not think you will see any such increase in business loans this year. Borrowing to carry inventories was an important factor in the increased loan accounts last year, but the prevailing viewpoint of manufacturers, wholesalers, and retailers toward inventories makes me think that bank borrowing on a comparable scale during the rest of this year, for the same purpose, is most improbable. Furthermore business has not had to borrow as much as seemed likely to pay Federal income taxes at accelerated dates, as required under the Mills Bill.

NO GENERAL LIQUIDATION THREATENED

I do not think we are threatened with any general liquidation of bank loans that will largely reduce the amount of commercial credit in use—I simply suggest that business borrowings this year seem unlikely to increase at the pace of last year. A single qualification of this observation that should be noted relates to the possibility of a bigger war. If a broadening and prolongation of the war in Korea becomes probable, or if war spreads to other parts of the world, business would forget its present inventory fears and add to stocks as rapidly as possible, with inevitable increase in bank borrowings for this purpose.

SHORT-TERM INTEREST RATES

Neither do I think we should expect further increase in short-term interest rates over the very near future, comparable to the continued rise in the short-term rate that occurred last year. I hear that the interest rate of 3% to prime names is soft and that this rate is being shaded when necessary. Even if long-term interest rates should reverse the downward trend that has reappeared in the last couple of weeks, I suggest that short-term rates seem unlikely to improve similarly, since I think that evidence of a trend toward higher long-term rates would induce many large businesses that currently are borrowing from banks to consummate long-term financing—to get their long-term money at low rates, in other words, while the getting is good.

OPERATING COSTS CONTINUE TO RISE

On the other hand, operating costs of the banks continue to rise. Bank help generally is not highly paid, and, though a leveling off in the rising wages may be approaching, the direction is still upward.

Netting these prospects for bank loans and the interest rate thereon for the remainder of this year makes us think the earnings of the big New York City banks in 1952 should average probably 10% above a year ago. Many of these banks, it must be pointed out, can hardly earn more than at this rate predicted for 1952 without encountering excess profits tax liabilities. In fact, 1952 operating earnings of several big New York City banks may be better than next year's unless the banks are able to obtain some needed relief from excess profits taxes. This prospect of lower earnings after taxes for some banks next year derives from the fact that such banks in 1952 will benefit by a carry-over of unused excess profits tax credits, but will not have a similar carry-over next year.

IMPACT OF EXCESS PROFITS TAXES

The impact of excess profits taxes on the commercial banking system, under the present law, is highly prejudicial to the maintenance of a sound, solvent, and conservative banking system in that the incidence of EPT discourages the acquisition of additional capital. Exemption from EPT to the extent of 6% on invested capital after normal taxes and surtaxes, such as granted the utilities, seems a small enough return on capital invested in as risky a business as commercial banking. But, if permitted to earn merely this limited return, commercial banks might see the wisdom of emulating the public utilities. The utilities have financed their enormous postwar growth conservatively and successfully by paying liberal dividends in relation to earnings, the higher dividends tending to raise the price of the stock and enabling the companies to obtain additional equity capital on more favorable terms than otherwise would be possible. Present dividend rates of the 15 largest banks in New York City represent a payout of less than 60% of estimated operating earnings in 1952. An appreciably higher dividend payout would be warranted if capital funds were bolstered through the sale of additional stock. And the increased capital funds, in turn, would increase the amount such banks could earn before becoming subject to excess profits taxes.

Under such conditions stocks of the big New York City banks probably would sell at a high price in relation to earnings and dividends, for the long-term investors of the fiduciary type that have been the principal buyers of bank stocks throughout most recent years have been taking a definitely long-range point of view toward investments, looking beyond the period during which earnings will be impaired by excess profits taxes.

FEDERAL RESERVE SYMPATHETIC

The Federal Reserve appears sympathetic toward the need of commercial banks for more lenient treatment with respect to excess profits taxes, but it seems hardly likely that such relief can be obtained in an election year. The banks appear to have such legitimate basis for requesting more favorable treatment under EPT laws, however, that legislation might be passed next year. The basis for special treatment rests on the fact that earnings of the banks in the base years 1946–49 were relatively low, due principally to Government control of the money market which restricted earnings. Consequently the New York City banks—and many large banks in other financial centers—must compute excess profits tax liability on the invested capital alternative. This means such banks can earn only 3.84% after normal corporation taxes and surtaxes, on all invested capital in excess of $10 million. This is far below the 6% rate of return after normal taxes and surtaxes allowed other regulated industries, like the rails and utilities. In equity, there is good reason why the banks should be allowed to earn as much as other industries in which the Government regulates rates, since the Treasury control of interest rates limits the rental rate for money that the banks can charge just as rigidly as if the application of controls were more direct.

CURRENT YIELDS REASONABLY GOOD

Current yields on New York bank stocks are reasonably good in relation to the yields available in recent years. The present yield on the stocks of 15 of the largest banks in New York City averages 4.57%, which is just eight basis points below the 4.65% yield provided by the same stocks at the average of the mean market prices in each of the five preceding calendar years. There are definite possibilities of dividend increases by several banks which are paying out dividends equivalent to less than 60% of current operating earnings, and which enjoy strong capital positions in relation to both deposits and risk assets. Numerous other banks are paying out equally small proportions of operating earnings, and such profits, when considered alone, would amply warrant dividend increases. Dividends naturally cannot be based solely on earnings; adequacy of capital funds must be carefully considered. But certain banks which have deposits of 14 to 16 times capital funds, and loans equivalent to 5½ to 7 times capital funds, may recognize the advisability of increasing dividends, as a first step toward strengthening capital accounts most advantageously.

Two other influences on the outlook for bank stocks should be cited, I think, before turning to the factor that to me seems far more important than any other element I have heretofore discussed. Up until a few weeks ago institutional buying of bank stocks had been continuous and perisistent throughout most of the last several years. Large numbers of pension funds, trust departments, savings banks, and other fiduciary investors have turned to bank stocks as conservative equities offering much better yields than bonds and best-quality preferred stocks. Large blocks of bank stocks have been bought for long-term holding by these professional investors in recent years, though the buying interest has diminished appreciably very recently. "Merger talk" likewise has precipitated some bank stock buying of a more speculative type. I think it probable that more of the smaller banks in New York City gradually will be taken over by the larger banks—especially when the smaller banks have well-located branches. But I doubt that we shall see many of the more spectacular mergers rumored in gossip that certainly has fanned the interest of speculative buyers in bank stocks. One or two large mergers may occur, yes; but a wave of mergers among the very large New York City banks would seem likely to encounter considerable opposition from the regulatory authorities. The concentration of banking power in New York City is not what it used to be, but, if even half the mergers rumored actually occur, we would have some exceedingly large banks in New York and fewer of them. Though there still would be plenty of competition among the surviving banks, I question the ability of such large merger candidates to obtain the required approval from regulatory authorities.

HIGH MONETARY POLICY OF GOVERNMENT

In my opening remarks I mentioned that I thought "The Outlook for Bank Stocks" would be a tiresome topic, since the outlook is for comparatively little change in earnings and stock prices, were it not for a single factor which may radically improve the prospect for banking equities. Actually, as I previously indicated, I think the elements in the outlook for bank stocks discussed thus far are completely overshadowed by one dominating influence. I refer, of course, to the high monetary policy of the Government—of whatever Government may be in power after next January.

Will we have a Government that is willing to actually fight inflation, instead of actually fostering it? Will we have a Government returning to monetary orthodoxy? If these questions are to be answered affirmatively, the outlook for bank stocks will be shaped by the changed fiscal policies of the Federal Government, not by the subordinate factors I have been discussing.

Stocks of the big New York City banks have proven far less profitable investments throughout most of the last twenty years than other high-quality equities, for reasons that have their roots in the fundamental fiscal policy of the Federal Government throughout that whole period.

SOLD AT HISTORIC LOW

Early last October—about seven months ago—New York City bank stocks sold at a historic low in relation to industrial stocks. At that time the Standard & Poor's index of New York City bank stocks stood at 107.4 when the Dow-Jones industrial average closed at 275.87, the index of bank stock prices being equivalent to only 39% of the Dow-Jones industrial average.

This represented the lowest level at which these bank stocks had sold, in relation to representative industrial stocks, for over thirty years. Even in 1933, when banking conditions were so bad as to precipitate the banking moratorium, the mean prices of the leading New York City bank stocks averaged 114% of the mean for the Dow Jones industrials. Throughout the war years, 1941 to 1945 inclusive, bank stocks sold at an average price equivalent to 67.9% of the Dow Jones industrials.

PRINCIPAL PROBLEM WELL KNOWN

The principal problem of commercial banks is very well known. They have been among the foremost victims of inflation. In the twenty-year period between 1932 and 1952 the average interest rate charged on commercial loans by the New York City banks declined from 4.20% to 2.83%, or just about one third. There are, as you know, very few services or commodities that sell at a price one-third below the prices charged in depression-ridden 1932. Banks, on the other hand, naturally have had to pay competitive prices for labor, supplies, and all the materials and services necessary to the operation of a banking business. In 1932 the salaries, wages, and all other expenses of a representative group of New York City banks absorbed 57.8 cents per dollar of operating income, leaving 42.2 cents per dollar of gross to be carried through to net. Last year, though largely relieved of interest payments on deposits, which was an important item of outgo in 1932, expenses nevertheless absorbed 75½ cents per dollar of gross income of the New York City banks, leaving only 24½ cents to be carried down to net. This represents a reduction of 42% in the profit margin of commercial banking in New York City during the last twenty years.

PRIME VICTIMS OF INFLATION

Thus the banks have been prime victims of inflation—and bank earnings will stay at a low level in relation to capital funds, so long as the banks must buy at 1952 prices and sell at prices that are still 25% below their selling prices of 1932.

Therein we have the reason for the relatively unfavorable profits earned by the Nation's biggest banks throughout most of the last twenty years. Costs inevitably have increased, but the selling price for the commodity the banks sell—the use of money—has declined very sharply, resulting in a thinning of the profit margin that has made the New York City bank stocks less successful investments throughout most of the last two decades than most [illegible] equities of equally good quality.

This trend toward lower interest rates has run a long time—as trends in the interest rate usually do. But we must recognize that the supply of and demand for money have not been the dominant factors in determining interest rates throughout most of the last twenty years. The supply has been vastly enlarged by a Government committed to almost continuous inflation, and interest rates have been kept at subnormal levels by the deliberate control of the money market by the Treasury and Federal Reserve, primarily in the interest of financing huge and increasing Government debt at the lowest possible cost.

It is in the hope for a change in this political control of money and interest rates that the owners of bank stocks must depend for a more profitable experience in the future.

A Government really determined to combat inflation would rapidly change the conditions under which commercial banks operate—and immensely improve their earnings outlook—subject again to the qualification that EPT will become increasingly onerous unless relief is obtained. But a Government fighting inflation hardly could fail to use a weapon of such historic effectiveness as the weapon of higher interest rates. Higher interest rates arrested the inflation in this country in 1920 and 1929, and higher interest rates have helped curb inflation in Belgium, Italy, and other countries since the end of World War II. Higher interest rates were among the first weapons used by the Churchill government when it returned to power in England six months ago. The rediscount rate of the Bank of England was promptly raised from 2 to 2½%, and very recently as you know was raised again to 4%.

MAKE MONEY HARDER TO BORROW

You may be thinking: "Borrowers won't care whether they pay ½% more or 1 or 2% more for money; they still will borrow, so long as they can make a profit on the money." I'll go along with that—to a limited extent. But rising interest rates make money harder to borrow. As rates advance, the bonds owned by banks, insurance companies, and other leading institutions go down in price. These leading institutions become less willing to sell their bonds and incur the capital losses involved, and hence have less money to loan.

ENTAILS SOME DEFLATION

Putting an end to inflation inevitably entails some deflation, because economic and monetary controls cannot be so precisely applied as merely to arrest inflation and freeze the economy at any predetermined level so far as currency in circulation, bank deposits, and interest rates are concerned. A definite reversal of the inflationary process will be necessary to stop this inflation, and the consequent deflation is bound to be painful to many segments of our economy. That's why inflation is popular, even among many who condemn it and know its long-run evils. In a period of recession in any event, our largset commercial banks would seem likely to derive advantages that would at least partially offset the adverse effects on earnings which come from the liquidation of loans and investments. This benefit would accrue from a probable reduction in reserve requirements, which now stand at 24% on demand deposits and at 6% on time deposits of central reserve city banks. And in New York City about 92% of the deposits of the leading banks are subject to the 24% reserve requirement, with only about 8% subject to the reserve requirement of only 6%. This is a very high proportion of bank deposits to be immobilized as nonproductive, nonearning assets. Bank depositors must be protected, obviously, by the maintenance of adequate reserves and sound banking assets—wholly aside from the Federal Deposit Insurance Corporation. But the exclusion of such a large proportion of deposits from the earning assets of the banks impairs the earning power of these institutions to a degree unwarranted except in a period of substantial credit inflation.

DEPENDENT ON POLITICAL OUTLOOK

The outlook for bank stocks, in my opinion, therefore is so very largely dependent on the political outlook, it is utterly impossible to appraise bank stock prospects without considering the profound political influences affecting bank equities. Just as the election of a conservative government in England promptly precipitated changes in Government fiscal and economic policy, so I suggest would the election of a Republican administration next November assure at least a partial return to monetary orthodoxy. The very least we might expect, I think, would be a contraction of the inflationary additions to the money supply, through a curtailment in governmental expenditures. Some substantial part of the huge short-term floating debt of the Government probably would be refunded with longer-term obligations, further tending to raise the interest rate. This does not mean that the cost of Government necessarily will rise, as a consequence of higher interest rates. A low rental rate for money hired by the Government does not lighten the burden of servicing the public debt nearly so much as low coupon rates suggest, for the inflation thus engendered obviously raises prices for everything else the Government must buy.

HEADED TOWARD HIGHER INTEREST RATES

Even if the Republican party is not returned to power, there seems some chance that we nevertheless may be headed toward higher interest rates. The long-continuing Federal Reserve pegging of the Government bond market, partially abandoned last year, had lent powerful support to inflation by instilling confidence in lenders that bonds bought at very low interest rates were safe. Much of that confidence already has been dissipated, and certainly the viewpoints of the Federal Reserve as expressed by its chairman and various members of the Board during the last year do not suggest that, in the absence of war, strong-arm support of the Government bond market at inflexible high prices will be resumed. Even a downturn in interest rates such as has reappeared recently in the long-term money market, and which I think may spread to short-term rates, seems hardly likely to restore the confidence of leaders in rigid support of very low interest rates by the Federal Reserve.

Accordingly I suggest that the stocks of the big New York City banks may be cheaper than they appear at an average price of about 13 times 1952 earnings and on a 4.60% yield basis—and at about 84% of conservatively expressed book values. The traditional banking factors for the rest of this year admittedly are uninspiring, but the election of a government with a different viewpoint toward our national economy and free enterprise could dramatically improve the outlook for commercial bank earnings, assuming—as I must say again—that the added earnings are not siphoned away by excess profits taxes; which, is, however, another Government decree that might be modified or abandoned quickly, under a Government by men with a determination to revitalize the forces that made this country great. *(Applause)*

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Chairman Berkaw: Thank you very much, Mr. Geyer.

Our first two speakers, in addition to making very interesting presentations, have co-operated fully by keeping within their time schedule, and so I suggest at this time that we take 30 seconds for a seventh inning stretch. *(Short recess)*

Chairman Berkaw: All right, gentlemen. Please be seated.

Our next speaker is Mr. Paul B. Kelly, director and first vice-president of the Anglo-California National Bank. He has been with this bank since 1923 and until 1940 specialized in the investment phases of the bank's business. Since then he has been participating more actively in all phases of the bank's operations. Also he is a member of the Security Analysts Society of San Francisco. It is with a great deal of pleasure that I present Mr. Kelly, who will give us the analyst summary and also the analyst's view from a banker's standpoint. *(Applause)*

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Paul B. Kelly: Thank you, Mr. Berkaw. Ladies and gentlemen, as I understand it, my function on this forum is to summarize what has been said by Mr. Braunschweiger and Mr. Geyer and to add anything that I think appropriate. For me to try to boil down what a fellow Californian has had to say about West Coast banking opportunities would be entirely out of character. So I would like to make it clear that my comments on that subject should be considered strictly as an addition and not as a condensation.

GROWING AT A FASTER RATE

That the West Coast has been growing at a faster rate for the past several decades than the country as a whole is a recognized fact. It is well known also that the various indexes of per capita wealth and purchasing power in this area are among the highest in the country. As this growth has occurred, more and more concerns have established plants or branches here, and the economic life of the area has become more thoroughly diversified.

BANKING INSTITUTIONS REFLECT GROWTH

Our banking institutions on the Pacific Coast, of course, have reflected this growth. The increases in their deposits and loans have been above average. Furthermore West Coast banks have been among the most progressive in making banking facilities available to the average man and in taking care of his needs for real estate, automobile, personal, and other types of loans.

WILL PROBABLY CONTINUE MANY YEARS

There appears to be no reason why the relatively strong growth trends in population and business activity on the West Coast will not continue for many years more. As a consequence, the banks in this area should show greater than average growth in resources and earnings.

Speaking generally, the larger banks on the West Coast have grown faster than the New York banks during the past ten years and now have lower capital-funds ratios. Share prices of the West Coast banks are lower relative to earnings. Their dividends are covered by a wider margin and provide a somewhat greater yield than the New York bank stocks. They therefore appear worthy of serious consideration by any investor who wishes to hold a diversified list of bank stocks.

But the larger question immediately arises. Since they do not appear cheap in relation to their current earnings and dividends, should any bank stocks be purchased at the present time by a shrewd investor? As Mr. Geyer has demonstrated in his talk, the market action and earnings of bank stocks as a group during the past two decades have been far from satisfactory, compared to the performance of a representative group of industrial stocks. Why have bank stocks not performed better during this period? Has their outlook improved so that we can reasonably hope for relatively better performance from them in the future?

POOR BANK MANAGEMENT

In my opinion, the failure of bank stocks to keep pace with industrial stocks has not been due to poor bank management. On the contrary, during this long period of unsatisfactory earnings, I believe there has been a marked improvement in bank management and in its operating policies. Adversity has been a severe but good teacher for the banks.

CREDIT DEPARTMENTS FUNCTION BETTER

Bank credit departments now function better. Closer credit information is being obtained, and loans are more carefully made and followed. The state and Federal supervisory agencies do a more thorough job. Loans are better diversified. Installment real estate, automobile, and personal loans have become considerably more important, and the techniques followed in making such loans have improved. There is less dependence on large commercial borrowers than formerly.

INVESTMENT PORTFOLIOS BETTER HANDLED

Bank investment portfolios have been better handled than they were during the 1920's. The standards of quality are much higher, and maturity diversification is far better. More thought is given to the problem of how best to coordinate the investment account with the loan portfolio of the bank so as to provide ample liquidity. Excessive liquidity, resulting in an unnecessary sacrifice in yield, is avoided on the one hand, and undue capital exposure from the holding of too many long maturities in order to obtain greater income is guarded against on the other.

CUSTOMER RELATIONS IMPROVED

Bank customer relations have grown better. More young men of ability, with the capacity to deal with the public, are being recruited. Banks are keeping in closer touch with their customers and their problems. There has been more effort to take care of each customer's banking requirements or to explain the reason properly whenever a customer's request cannot be granted.

In considering bank earnings, it should be realized, of course, that they have been more conservatively stated than during the 1920's. Banks now generally make a charge against each year's earnings to provide a reserve for future loan losses. This charge is based on each bank's actual loss experience over a representative period of years. This procedure was a much needed reform in bank accounting methods. Before it was adopted, bank earnings tended to be overstated in the boom years when few losses were realized and to be understated in the depression years during which loan losses were largely concentrated.

INCOME TAXES

Income taxes frequently are stated as one of the reasons for the unsatisfactory earning performance of the banks. But this does not appear to be a sound explanation, since banks are taxed in the same manner as other corporations. In view of their modest earnings during the past two decades, excess profits taxes seem to be especially unjustified for banks. Therefore proposals have been made to provide the banks with some relief from them. If such relief is obtained, I doubt if it will help the general situation very much because I believe that a high percentage of banks either are not affected by excess profits taxes or are subject to them only to a minor extent. As a practical matter, it will be difficult to draft, as well as to pass, the necessary legislation.

INSUFFICIENT DEMAND FOR BANK LOANS

The unsatisfactory earnings of the banks during the past twenty years seem to me to be largely attributable to the fact that during this period there was not sufficient demand for bank loans to permit the banks to charge adequate interest rates. During the 1930's, the demand for bank credit was small, and the easy money policies of the Federal Government and competition from Government loaning agencies kept interest rates at very low levels. You also will recall that during the war years the Government bond market was pegged at low rates, and the huge inflation of bank deposits was neutralized by the enforcement of price and production controls.

Since the close of the war, however, this condition has been changing. During this period the price level has been adjusting itself to the greatly enlarged money supply. The ways in which this has occurred are familiar to all of us. They include the successive rounds of wage increases, the increases in farm and other commodity prices, the bull markets in real estate and common stocks, and the numerous other changes in the cost of living and doing business.

The Argus Research Corporation recently published a study of the money supply which indicates that, as a consequence of the change in the general price level, the money supply now is no longer high. In 1930 the total of currency outstanding, plus demand and time deposits, was equivalent to 58.6% of the total of the Nation's expenditures for all types of goods and services. By 1933 the money supply had risen to 74.5% of the gross national product. During most of the 1930's, with the exception of 1937, it ranged from 69 to 71%. Thereafter it rose until at the end of 1946 it reached the high ratio of 77.6%. Since that time it has declined so that at the end of 1951 it stood at 56.7%, or well below what it was in 1930.

It now takes much more money to finance the cost of a home or an automobile, to build a manufacturing plant, or to carry on a business. As a consequence, the demand for bank credit has steadily risen, and it now can no longer be said that there is a dearth of bank loans. Though total bank loans recently have leveled off and declined somewhat, I believe it is sound to conclude that, unless the Federal debt is to be paid down and prices are to be deflated, the demand for bank loans and other types of credit will continue at a relatively high level. A business setback would, of course, reduce the demand for credit and soften interest rates. On the other hand, it seems just as certain that further increases in the Federal debt and the price level will increase the need for bank credit and strengthen interest rates.

BANK OPERATING INCREASED SUBSTANTIALLY

Since the end of World War II, bank operating has increased substantially as the result of increasing loan volume and rising interest rates. But, during this same period, the rise in bank operating expenses and taxes has kept pace with the increase in bank income, so that there has been little improvement in net earnings. The outlook for improved bank earnings, therefore, seems to be largely dependent on whether the banks will be able, in the future, to increase their interest rates on bank credit sufficiently to widen the spread between their income and their expenses.

PRICE BOUND TO INCREASE

We all know that, when the demand for any commodity begins to equal or exceed its supply, its price is bound to increase. When the demand clearly exceeds the supply, its price usually rises sharply. In a similar manner, I believe that bank interest rates may rise substantially if banks generally become convinced that they are getting to be "loaned up." Can we estimate roughly when this point will be reached? I think that we can and that many banks, until the recent moderate decline in loans occurred, were reaching the point where they did not want their loans to increase much further. In my opinion, this is the main reason why the prime commercial rate was recently increased twice in quick succession.

How high an individual bank may be willing to allow its loans to rise will depend on the nature and character of its loans, as well as on its deposit structure, its capital ratio, and many other factors, including the judgment of its officers. Wide variations in this respect, therefore, must be expected. But, on the whole, I think that banks at the present time want to keep highly liquid by maintaining about 50% or more of their total deposits in cash and Government bonds. I also feel that most banks are inclined to try to hold their loan totals down to somewhere around 40 to 50% of their total resources, or to around six to ten times their capital funds. Furthermore, it seems to me that most banks are reluctant to improve their capital-funds ratios by the sale of additional shares, since their issuance under existing market conditions usually results in a dilution of book value and earnings per share.

In summarizing the outlook for bank stocks, therefore, it seems to me that the conditions that have so greatly restricted bank earnings during the past twenty years have already changed materially; that the future demand for bank loans is likely to continue, subject to cyclical fluctuations, at a relatively high level; and that, if the demand for bank credit increases much above its existing level as the result of further inflation or other causes, it may bring about a sharp increase in bank interest rates and considerably better bank earnings. There is no way of telling, of course, whether such a rise in interest rates will occur, nor, if it does, when it will happen, and to what extent. Neither can it be predicted to what degree the Federal agencies would try to prevent or counteract such a development. Nevertheless the outlook for higher interest rates and for better bank earnings seems to have improved. *(Applause)*

* * *

Chairman Berkaw: Thank you very much, Mr. Kelly.

He, too, has co-operated, and we are running right on schedule, so that we do have a bit of time this morning for questions. If any of you would like to direct a question to any member of the panel, will you please so indicate? Will you rise and give your name and business connection?

Henry L. Rice (Union Bank & Trust Company, Los Angeles): I would like to ask Mr. Kelly about this prognostication that the demand for loans will increase. Is that based on an equal forecast that business conditions will improve?

Paul B. Kelly: As I understood it, you asked me whether or not, in my prognostication that bank loans and interest rates will increase, there will also be improvement in business, is that a correct statement of the question?

Mr. Rice: Yes.

Mr. Kelly: I think that you misunderstood me. My point was not that loans will rise in the immediate future but that, if there is an increase in the price level as the result of the increase in debt, or otherwise, that will cause additional demand for bank credit and bank loans, and, therefore, as the banks get loaned up, their interest rate structure will be raised. I didn't forecast, of course, that there would be an increase in loans in the immediate future. That involves a forecast of business conditions that I made no attempt to cover in my speech.

Chairman Berkaw: Are there any other questions? If not, I would like again, on behalf of the National Federation committee, to express our appreciation to Mr. Kelly, Mr. Geyer, and Mr. Braunschweiger for their very interesting presentations.

We will call this forum adjourned.

SUBURBAN PROPANE
GAS CORPORATION

INCREASED COMMON DIVIDEND
QUARTERLY NO. 26 DECLARED
30¢ per share
(formerly 25¢)
Payable August 15, 1952 to stockholders of record August 1, 1952.

R. GOULD MOREHEAD,
Treasurer

July 22, 1952

ALLEGHENY LUDLUM STEEL CORPORATION
Pittsburgh, Penna.

At a meeting of the Board of Directors of the Allegheny Ludlum Steel Corporation held today, May 19, 1952, a dividend of fifty cents (50c) per share was declared on the Common Stock of the Corporation, payable June 30, 1952, to Common stockholders of record at the close of business on May 31, 1952.

The Board also declared a dividend of one dollar nine and three-eighths cents ($1.09375) per share on the $4.375 Cumulative Preferred Stock of the Corporation, payable June 15, 1952, to Preferred stockholders of record at the close of business on May 31, 1952.

T. A. WHEELER
Assistant Secretary

DIVIDEND NOTICE
TO 200,000 SHAREHOLDERS

A DIVIDEND PAYMENT of Nine Million Six Hundred Thousand Dollars was paid on May 31 to the more than Two Hundred Thousand stockholders of record on May 15.

This second quarterly dividend amounts to 40 cents per share, or at the annual rate of $1.60 per share, and brings to Nineteen Million Two Hundred Thousand Dollars the amount paid to stockholders in the first half of 1952.

THE CURRENT PAYMENT DATE OF MAY 31 WAS SELECTED IN LINE WITH THE BOARD OF DIRECTOR'S POLICY OF ACCOMMODATING STOCKHOLDERS BY MAKING DIVIDEND FUNDS AVAILABLE TO THEM BEFORE THEIR QUARTERLY INCOME TAX PAYMENTS ARE DUE.

L. M. GIANNINI,
President

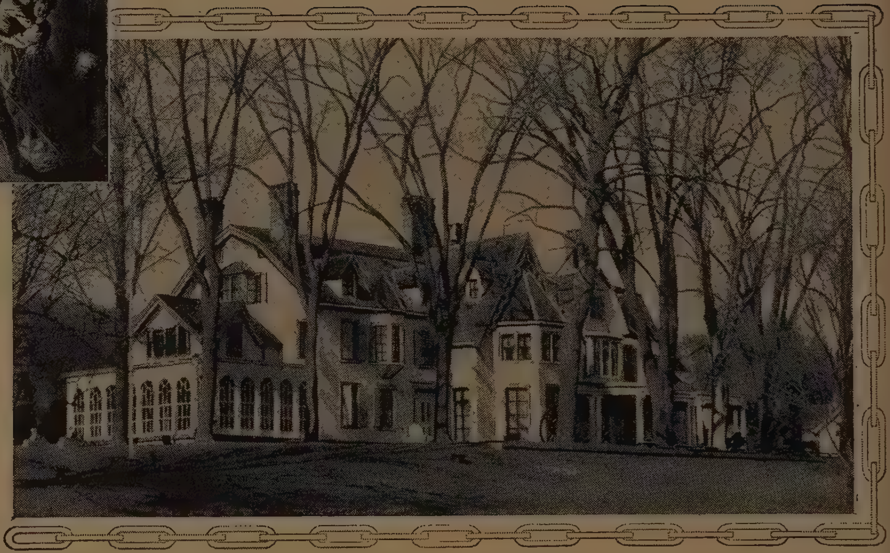
FACTS ABOUT THE WORLD'S LARGEST BANK

WORLD'S LARGEST
state-wide branch banking system
total loans and discounts
total of FHA loans
total of consumer loans by banks
number of deposit accounts
number of bank stockholders
total deposits and resources
number of savings accounts

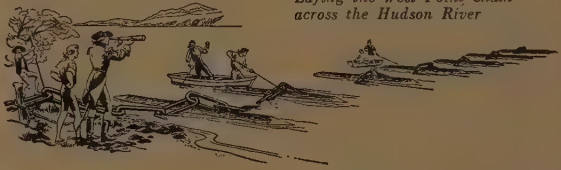
Bank of America
NATIONAL TRUST AND SAVINGS ASSOCIATION
Members: Federal Deposit Insurance Corporation
BANKING THAT IS BUILDING CALIFORNIA

FAMOUS AMERICAN HOMES

An early iron forge



THE IRONMASTERS OF Ringwood



Laying the West Point chain across the Hudson River

FROM the mines of Ringwood in northern New Jersey came iron for every American war from the Revolution through the first World War, and some of the country's ablest ironmasters made Ringwood Manor their home. The detailed history of the mines begins in 1764 with the colorful Peter Hasenclever who reputedly employed servants to carry his wife's train and a band to serenade him while he dined. Under his management Ringwood became an important part of the first large-scale development of the iron industry in this country.

Robert Erskine, a later ironmaster, organized a company of militia to protect the iron works when the Revolution started and supplied the continental army with iron in various forms. His most outstanding contribution to the cause was his work as official mapmaker to the army for which post he was recommended by Washington. Associated with Ringwood during Erskine's incumbency were several devices with which attempts were made to prevent the British from coming up the Hudson. Iron for the first chain used to obstruct that waterway came from Ringwood, and it is believed that some of the iron for the West Point chain, the only successful obstruction, was a product of the Ringwood mines.

Ringwood's most celebrated proprietor was Peter Cooper who bought the property in 1853, the year The Home was founded. A man of many talents, he built the famous locomotive Tom Thumb, promoted the first transatlantic cable with Cyrus W. Field, and was a Greenback candidate for President. His partner and son-in-law, Abram S. Hewitt, last of Ringwood's ironmasters, served several terms in Congress and was mayor of New York.

The manor house was built by ironmaster Martin Ryerson after an earlier dwelling was destroyed, probably by fire, in 1807. Now owned by the State of New Jersey, it is open to the public as a museum and contains many items of interest formerly owned by the celebrated Cooper and Hewitt families.

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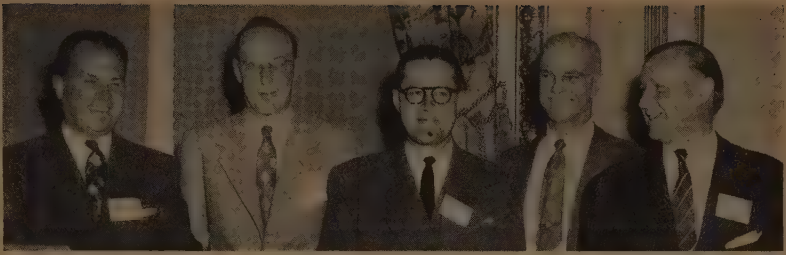
At the speakers' table of the insurance industry forum *(left to right):* Horace W. Brower, Richard H. Samuels, Fred H. Merrill, Chairman Samuel B. Jones, and Shelby Cullom Davis



George Shimmon

The Insurance Industry

TUESDAY MORNING, MAY 6, 1952

SAMUEL B. JONES, Fire Association of Philadelphia, presiding.

Chairman Jones: Ladies and gentlemen, I think we had better convene the meeting at this point. This is the insurance industry forum, the first to be held at a Federation Convention. We have a lot of ground to cover, and we have only an hour and a half to do it in. We have three speakers representing the major divisions of the industry and we are particularly fortunate in having the leading officials of these companies with us today. Our first division is fire and the allied lines, and Mr. Fred H. Merrill of the Fireman's Fund Insurance Company, San Francisco, will undertake that discussion. It is with a great deal of pleasure that I introduce to you Fred Merrill, who will speak on "The Outlook for Fire." *(Applause)*

* * *

Fred H. Merrill: In approaching my subject "The Outlook for Fire," I think it is desirable to orient ourselves concerning the magnitude of the industry we are talking about. From a leading statistical source which reports on property insurance affairs I have taken a few figures that summarize this point. My reference is to all classes of property insurance underwriters, whether they be capital stock companies, mutuals, reciprocals, interinsurance exchanges, or whatever. In other words we are talking about the aggregates for all companies engaged in this very essential industry.

ASSETS OF PROPERTY INSURANCE COMPANIES

At the end of 1950 the total admitted assets of the property insurance companies exceeded $13 billion, of which about 82% or $10,700 million represented the admitted assets of the capital stock segment of the industry. In terms of sales, or annual volume of premiums written, the figure for 1950 was in excess of $6,800 million, of which about 77% or $5,200 million were premiums written by the capital stock companies.

Although property insurance is by no means so important to the investment fraternity as the life insurance business, it nevertheless occupies an important position in relation to the securities business. For example, at the end of 1950 these companies owned some $5,200 million of U. S. Government obligations and more than $2 billion of other types of bonds, including states, municipals, and corporations, and their stock holdings had a market value in excess of $3,400 million. These securities produce for these companies more than $300 million of annual net investment income, something over half of which is paid out to the share holders of the capital stock companies, and the remainder is reinvested to provide a growing equity for share holders.

Not only are these companies important to the investment fraternity; their contribution to our over-all economy is indicated by a few figures taken from the composite expense exhibit. Of the $6,800 million of premiums written in 1950, over $3 billion was paid out for losses or for the indemnity that is provided by the insurance contract. This indemnity is, as you all know, an essential ingredient in the pattern of economic progress. Without it corporations and individuals could not borrow money, goods could not be transported, and the risks of investors would be immeasurably increased.

COMMISSIONS

The next largest element of expenditure by the property insurance industry is the payment of some $1,300 million of commissions to agents and brokers, of whom there are thousands scattered in every community throughout the country. The local insurance agent is always an important man in his community. He typifies the American system of free enterprise and initiative.

More than $480 million is paid by this industry in salaries and wages. More than $21 million is paid in pensions to retired employees. Insurance people travel a great deal, and their expense accounts for traveling in 1950 recorded $58 million of expenditures, from which transportation companies, hotels, and others benefit. They spent $47 million for rent, office equipment purchases totaled more than $22 million, printing and stationery amounted to $37 million, postage and express charges were more than $24 million, and finally they paid over $180 million in Federal and state taxes.

Forty or fifty years ago the property insurance field was limited largely to fire insurance and some marine classifications. Indicative of the effect that technological progress has on the industry is the fact that the largest single category of property insurance now written is directly traceable to the automobile. Premiums written in connection with motor vehicles now total more than $2,600 million annually, of which about $1,200 million are for the physical damage coverages which have always been referred to as the fire lines and which were written in the fire insurance companies. The public liability and property damage classes or the so-called third-party coverages now total about $1,400 million of premiums. These are the so-called indemnity company coverages and were written as a companion policy in order to provide full coverage.

The next most important classes of business written by property companies are the casualty lines other than automobile liability and property damage, which now total nearly $2 billion, or about the same annual premium volume as the variety of coverages we call the "fire lines."

MARINE

The fourth broad segment in terms of premium volume are those coverages classified as marine. We refer to "wet marine" as the indemnities written for hulls and cargoes transported by water, and to "dry marine" as the inland transportation, personal property floater, and other special classes that do not fall into the other categories.

With this background on the economic importance of the property insurance business, we can approach the subject of "The Outlook for Fire" with a relative degree of simplicity. In a sense the forecast is a relatively easy one, since the outlook is based on economic fundamentals.

Though exact figures are not available, I have reliable estimates prepared by a competent authority that indicate the amount of straight fire risks written in the United States. Starting at a point most of us remember, 1929 and the early '30's, the properties covered for fire had an insured value of about $65 billion. At the time World War II ended this figure was over $100 billion, and as a result of the postwar inflation the figure is now well over $200 billion.

This increase in the value of risks underwritten of about three times correlates to the Department of Commerce sales of all industries, which were about $138 billion in 1929 and over $420 billion in 1950, again a threefold increase.

Another fact supporting the increase of fire risks underwritten is the Department of Commerce figure on the value of new construction, public, private, and maintenance and repairs. During the six-year period 1946 to 1950 the total value was about $150 billion.

The industry basically sells only one product: namely, protection. The insurance contract provides the vital protection for the values created by the ventures of a free economy. It therefore provides an important pillar of support to the banking business. As underwriters and investment bankers, you know that your due diligent research requires a careful examination of the insurance protection carried by every project you propose to underwrite.

You have seen our great bridges over San Francisco Bay, and you may remember the consternation suffered by many investors and investment bankers some years ago when the Tacoma Narrows Bridge went down in a violent storm. Yet in that instance, as with our Bay bridges, the bondholder had the constant assurance that his investment was secured by insurance protection.

The share holders of Monsanto Chemical Company scarcely noted in the annual result the tremendous loss suffered by that company as a result of the Texas City disaster. The protection of the insurance contract again provided the funds to rebuild, and the use and occupancy cover restored the normal operating profit that otherwise would have been lost.

Such examples could be recited at length, but my point is probably established in the mind of each of you by some individual occurrence with which you have had intimate contact. Fire or casualty insurance is unlike life insurance in this respect. I have collected several times on my property policies, but my life insurance will never do *me* any good.

Since insurance is so intimately connected with our individual lives and with every venture in our economic life and progress, it follows that the property insurance industry must grow in direct proportion to the growth of insurable values and the increase in population. A quick reference will illustrate this point. In the ten years between 1950 and 1960 we will have an increase in population of children between the ages of 5 and 14 of 10 or 11 million. In other words, we are going to have to provide in our elementary school system for this added population. Shortly afterward these larger numbers of children are going to be moving into the high school systems, ultimately into college, and finally into family formations.

At the other end of the life cycle we are all going to live longer. We as investors like Johnson & Johnson because of the high birth rate and increased sales of baby powder; we like the drug shares because of the magic things they do to make people healthier and to live longer. But did you ever stop to consider the fact that, the more babies that are born, the more schools that have to be built, the more family units formed, and the longer we live, we need more and longer insurance protection than ever before.

You are all economists in a sense and are of a statistical turn of mind; therefore, using your own forecasts and projections of economic trends, you can determine, perhaps better than I, your own estimate of the future. However, if we can assume that the fundamentals of the past will prevail in the future, we can assume that the insurance industry is certain to enjoy a steady if not dynamic long-term growth, contributed to in part by the increase in population and the great increase of insurable values to be expected in the future. Personally I am optimistic about the long-term trend. Our standard of living will show steady improvement as a result of the technological advances that are occurring constantly and at an accelerated rate in every field of endeavor.

CONSTANTLY DEVELOPING IMPROVED FORMS

Another important fundamental is that the industry itself is constantly developing new and improved forms of insurance coverage. In this connection we are approaching the end of the time when we can meet in a forum such as this and discuss the outlook for the industry along the lines of fire companies and casualty companies. As recently as 1946 the segregation was almost complete, but since that time legislation has been passed in all the states except Arizona and Ohio permitting one company to write all lines of business on a full multiple-line basis. It is in this fact that we have another of the most fundamentally, important considerations bearing on the outlook for the industry. Extreme changes will not occur overnight, since it will take time to effect the transition, but I can assure you that it is going on all the time. Each fire company or casualty company can now become a fire-and-casualty, or so-called multiple-line, company and can write all the kinds of insurance all the companies combined could write before. The industry is constantly adjusting itself internally, fitting existing types of policies to the multiple-line program, and is continually conducting research for the development of new policies which are not limited by the compartments of fire and casualty. The so-called multiple-peril package policies provide indemnity against any combination of insurable perils for which research supports the fact that there is a market, regardless of whether these perils are now in a group commonly labelled "fire," "casualty," or "inland marine." Ultimately those of you who are householders should be able to buy one policy at a single premium which may package several policies you now own. Conceivably this will encompass your fire, theft, comprehensive personal liability, personal property floater, and possibly others.

POSSIBLE TO BROADEN PROTECTION

When existing coverages are packaged into one policy, it is possible to broaden the protection to include other and equally insurable hazards that are not now generally available. The trend toward multiple-peril underwriting will not change or eliminate present policies. The buyer of insurance will still be able to buy any of these separate coverages that he may want. They in effect will supplement rather than replace the existing structure.

You have all heard reference to the so-called deductible forms which are designed to provide protection for the very large risks. Some years ago many large corporations considered it economic to go the route of self-insurance by setting up insurance reserve accounts and in effect paying their own losses. The inflationary trend of recent years has materially changed this situation to the point where few corporations today can provide their own indemnity for the enormously increased values that have occurred. They are still willing and able to absorb the smaller losses, but they need more than ever before protection against the large or the so-called catastrophe loss. Within the past two years several very large industrial corporations have come back into the insurance market for an excess of loss cover. One such company had for many years been a self-insurer, but, because of the enormously increased replacement cost of physical plant and equipment, an annual premium of about $800,000 has come back to the capital stock insurance companies.

If any of you have had occasion recently to review your own situation, you can readily appreciate the fact that a tremendous educational job remains to be done by the insurance industry to teach the assureds the merit and advantages of insuring to value under present inflated conditions. Although total premiums written have increased more than threefold since 1939, I am sure that we have not scratched the surface in regard to full insurance to value. The great eastern windstorm in November 1950 has now been recorded as the greatest insurance loss since the San Francisco fire in 1906. Yet I do not fear contradiction in the statement that the uninsured losses were equal to those that were insured.

Another consideration is the outlook for profits. In this essential consideration insurance differs from all other forms of industry. In the public interest legislation has been provided that in effect dictates that insurance rates must not be excessive, they must not be unfairly discriminatory, but they must be adequate—adequate to maintain the solvency of the company and the integrity of the contract.

You may all have seen the tabulation in the April National City Bank letter which recorded the net income of leading corporations for the years 1950 and 1951, covering more than 3,400 corporations engaged in all types of industries. The tabulation reports a return on net assets of 11.4% in 1951 compared to 13.4% in 1950. The comparative return of 66 fire and casualty insurance companies was 5.7% in 1951 and 7.9% in 1950. It is characteristic of the insurance industry, because of the degree of stability inherent in the business, to earn a lesser rate of return during periods of prosperity than the average of industry generally. However, this point must receive the continuing consideration of the regulatory authorities, meaning the insurance commissioners of the various states, because of the responsibility they have not only to maintain a rate structure that will insure the solvency and the ability of insurance companies to meet their obligations, but also to provide rates that will produce a return comparable with other industries. They also have the obligation to preserve investor interest and provide earnings that will attract capital to this essential business.

The fire insurance rating formula provides that rates on a given class of risk within a rating territory, a state for example, must over an average period of time produce an underwriting profit. If profits on a given class become excessive, rates must be reduced, and, conversely, if adverse experience in that class produces a negligible profit or a loss for a period of time, the rate shall be increased.

This does not mean that poor underwriting of unsound risk will be subsidized or that skillful underwriting and careful selection will be penalized, but only that, on the basis of aggregates and averages of large numbers, the class rate should always be set at a figure to produce an average over-all moderate underwriting profit.

The philosophy supporting this rate-making procedure is that it is in the public interest for the property insurance industry to secure rates that will produce adequate reserves and capital and surplus of sufficient strength to assure at all times and under all conditions that funds will be available with which to pay losses. To this must be added the interest of investors in fair and adequate net earnings.

During the recent spiral of inflation this fundamental fact has become obscure at times. Investors in regulated industries, whether public utilities, railroads, or insurance, have had reason to be impatient during recent years with the sometimes cumbersome processes of rate making.

Over the years the industry has produced a relatively steady but moderate average underwriting profit that has by traditional practice been plowed back and invested to provide a growing surplus as increased protection for the policy holder and a greater equity for the share holder.

The investment of these capital and surplus funds as well as reserves has produced a continually increasing investment income. Share holders of insurance companies have received their dividends from this investment income segment. The enviable record of the industry for continuity of payments and periodic increases is too well known to require comment. It might be added, however, that some years ago it was traditional practice to pay out to share holders about 75% of investment earnings and add the balance to underwriting gains in order to finance the steady growth of premium volume. However, with the advent of inflationary considerations and the consequent sharp increase in premiums and reserve requirements, it has been necessary and desirable for most companies to retain a larger share, with the result that the average payment is currently in the 50 to 60% range.

Once we enter an area of stability or some deflation, it is to be expected that dividends distributions in the order of 75% will again be restored.

It seems to me that, on the basis of these considerations, the outlook for the property insurance industry could be summarized as follows:

1. There will be a continual and steady if not dynamic growth in premium volume.
2. In the public interest the industry will continue to improve its only product—protection.
3. Its share holders will continue to enjoy, as they have in the past, a steady growth in equity value and dividend income. *(Applause)*

* * *

Chairman Jones: Thank you, very much, Fred Merrill. You inspire me with confidence.

Our next subject is "The Casualty Situation." To lead this discussion, we have Richard H. Samuels, financial secretary, Continental Casualty Company of Chicago. I am sure he will have some very interesting things to tell us on this subject, and, without going into all the wonderful merits of this gentleman and the great company he represents, I now introduce Mr. Samuels, who will speak to us on "The Casualty Situation." *(Applause)*

* * *

Richard H. Samuels: It would be considerably more to my liking to be able to stand before you gentlemen today and exude the optimism that our customers and clients always enjoy. The characteristic of optimism is sometimes too habitual in our profession. We have a tendency to assume that, when conditions are bad, they cannot get any worse and, therefore, are bound to improve. Conversely, casualty insurance underwriters can be accused of being perennial pessimists, and it is understandable how the events of the last 18 months have accentuated this characteristic. I have tried not to be unduly influenced by those company pessimists nor by the insurance stock analysts and buyers who appear to be the optimists at the moment. My characterization of this latter group as optimists is predicated on today's level of casualty insurance stocks relative to their present and prospective earnings.

The term "product mix" has become a very popular term with security analysts over the past few years. I think it fitting that we clearly understand the so-called product mix of the casualty industry, or the importance of each of the lines in the over-all picture. In 1950 the principal hazards underwritten by the stock companies from the standpoint of their importance in premium volume were: liability lines 29%, accident and health 26%, property damage and collision 17%, workmens' compensation 15%, fidelity and surety 5%, burglary and theft 3%. This breakdown does not clearly reflect the major importance of automobile lines which are scattered among several of the above classifications. In the aggregate, auto premiums equaled 40% of all casualty volume during 1950, with auto liability equaling 22% and auto property damage 11%. The remaining volume came from collision and miscellaneous auto lines.

It is, fortunately, not within my province today to discuss individual companies. I do want to point out, however, the importance of understanding this product mix in analyzing the present and future outlook for a specific company. We know that auto liability and property damage underwriting have been and continue to be unprofitable and that workmens' compensation underwriting has been producing unfavorable results. Bear in mind that auto experience in most cases controls the final underwriting results. Actually it has been the so-called specialty lines, such as accident and health and miscellaneous liability lines, that have kept the over-all industry figures from showing greater deterioration. Therefore, in any study of a particular company, the representation in the various classes of the business becomes of paramount importance.

UNDERWRITING EXPERIENCE OF PAST 10 YEARS

I want to trace briefly the over-all underwriting experience of the industry over the past ten years. The favorable results in the period of restricted driving during World War II were followed by the 1946 debacle in auto lines. This came about with the removal of gasoline rationing and an increase in accident frequency at a time when rates reflected the favorable experience of the previous period. The over-all loss ratio of the stock casualty companies, which had averaged around 53% during the war years, suddenly jumped to 61.2% in 1946. Though the industry as a whole showed a slight profit in 1946, there were a number of companies that were seriously in the red—naturally those companies that wrote a preponderance of auto business. Rate increases were forthcoming, and over-all loss ratios declined to 58.2% in 1947, 56.6% in 1948, and 55.7% in 1949. However, it was not until 1948 that auto liability broke into the black. In 1949 auto property damage produced a small profit. The results do show that the three years leading up to 1950 were characterized by constantly increasing dollar profits for the industry, and 1949 produced the highest earnings ever attained.

It became evident early in 1950 that auto insurers were again caught in a tight squeeze between inadequate rates and climbing costs. Through June of 1950, the over-all loss ratio was up less than two points, but, with the outbreak of the Korean war and the resultant sharp rise in the general price level, it was obvious that real trouble, particularly on auto lines, was ahead. The higher price level called for upward revaluation of existing loss reserves on old claims and necessitated higher settlements and higher reserves on new claims. The industry developed an over-all loss ratio of 60% for 1950, compared with 55.7% in the previous year. In retrospect, we can see that the results reported for 1950 were unrealistic and that they would have been less favorable, had there been full realization of what the actual costs of settling claims were going to be. Auto liability and property damage experience became progressively worse during 1951, and the final results will show that it was the most unsatisfactory year since the early '30's. The over-all loss ratio was around 65%, at which level the entire industry was bound to be on an unprofitable basis from its underwriting operations.

The problem of auto liability and property damage insurance has been the greatest single factor responsible for the deterioration in casualty earnings. Flat rate increases were granted in 40 jurisdictions between May and December 1951, which raised the rate level of auto liability 17.9% and of property damage 14.5%. However, less than 2% of this increase was reflected in 1951 experience, and it will take many months for companies to gain the full benefit of these emergency increases. At the present level of claim costs and accident frequencies, it is estimated that these rates will barely cover auto liability losses and will fall short of covering property damage losses.

If these estimates are correct, it is obvious that a large part of total casualty underwriting is going to continue to show no return for the stockholder unless further substantial rate increases are granted. It should be noted that, despite rate increases granted during 1951, the Nation-wide rate level on bodily injury coverages is only 27% above the rate level of January 1941, while average claim costs have jumped 65%. The auto property damage rate level advanced 131% in the same period while average claim costs are up nearly 150%. Actually the average cost of auto liability insurance in the United States at present is only $2.51 more per policy than it was in the depression year of 1932, and present rates are actually cheaper in some territories than during that period.

TREND OF AUTO REPAIR COSTS

We are all as familiar with the trend of auto repair costs as we are with the other components of our daily costs of living. We know that a front end repair job on a car may cost around $300 today, compared with $100 in 1940. A paint job that cost $85 a few years ago may be as high as $150 at the present time. This same problem holds for every facet of our daily life. The price inflation psychosis has likewise permeated juries, with the result that some of the awards being made today in bodily injury suits are bordering on the fantastic. I think that this problem of jury awards is one of the most disturbing factors in the auto insurance picture today. Insurance companies have always been cognizant of their vulnerability before juries and have generally endeavored to settle all but unreasonable and fraudulent claims out of court. There have been hundreds of cases recently which insurance companies, on advice of counsel, have taken to court only to be dealt a tougher settlement than they might have effected privately. There are certain cities in which it is particularly dangerous to take a case before a jury because of the presence of attorneys who are specialists in obtaining excessive awards for their clients in personal injury suits. San Francisco is one of those cities. I am told that schools exist today for the development of attorneys to specialize in this type of case. With the knowledge of what inflation-minded juries might do for them if they carry their case to court, lawyers are demanding and, unfortunately, getting much higher settlements from casualty companies.

Fundamentally auto liability and property damage insurance are at the mercy of two factors: increases in the price level, and rate-making procedures tied to past underwriting experience. Companies find themselves always a jump behind the level of claim costs at the time new rates are promulgated and fall another jump behind, owing to the additional lag of as much as a year before rate changes become fully effective. The prime problem is to bring rates into closer balance with current and prospective experience which is a statistical and, unfortunately, a political problem.

ACTUAL SHORTAGE OF AUTO INSURANCE

One of the inevitable consequences of the present acute situation has been the development of an actual "shortage" of auto insurance. Companies have taken steps to reduce their unprofitable business and have become much more selective in their underwriting. At the present time a majority of the states have financial responsibility laws under which anyone involved in an accident must furnish insurance or post security to cover possible judgments or lose his license. For those unable to obtain insurance, there is an assigned risk plan or pool to which all companies operating in the state must subscribe, taking their pro rata share of all risks. The volume of business in such pools is growing rapidly. These pools present the evidence that there are very complex and disturbing social problems to be solved in the business of underwriting auto risks today. The fact that there is a segment of the auto-driving public that finds itself unable to get insurance in any other way certainly raises the specter of state insurance funds and the future of private enterprise in the field.

PRESSURE FOR MERIT RATING

There exists today a growing pressure on the industry to develop some type of "merit" rating that would make a distinction between careful and careless drivers. Recently several of the state insurance commissioners have come out in favor of such a plan. I do not propose to get into a discussion of this development, other than to say that such plans have been tried in the past and have never been successful. By far the great majority of policy holders operate an automobile for many years without an accident. Question may arise concerning the soundness of penalizing such a policy holder when he is unfortunate enough to have the accident against which he is insured.

There is no real apparent solution to this complex problem of auto insurance. Further rate increases can probably breathe some profit back into the business if present general price levels can be held. Inflation has been the prime mover in bringing about today's problem, and, if you visualize a continuation of inflationary pressures with further price rises, the situation is bound to deteriorate further. It has become a social problem, and the resultant implications are too obvious. More has to be done in promoting stricter law enforcement and safer driving, particularly in the class of drivers under 25 years of age, who have 98% more fatal accidents than the average and 65% more nonfatal accidents.

Up to this point I have concerned myself primarily with the damaging effect of auto experience on the over-all profit showing. There have been other factors contributing to the deterioration of the loss ratio. Workmens' compensation insurance played its part. Adverse underwriting results were realized during each of the past two years, with 1951 being particularly bad. These adverse results were brought about by increases in benefits under the laws, by declining rates in 1950, and continued liberalization on the part of administrative authorities and courts. Workmens' compensation insurance is not quite so vulnerable to the ravages of inflation as the auto lines. Awards are in fixed dollar amounts under the law, but medical and hospital charges are prime elements of compensation costs, and these, of course, have risen. We are all aware of the increased complexities of prescribed medical treatment. It is also true that improved techniques and drugs have extended the lives of many totally permanently disabled cases far beyond the old tables of expectancy. For all states combined, where private insurance carriers write workmens' compensation coverage, the private insurance carriers' average rates were steadily reduced from 1939 through 1950, even though higher benefits were provided by legislative activity. In 1951, rates turned up for the first time since prewar, but at the end of the year the average rates paid by industry were still 20% below 1939, in spite of the increased benefits. Rates are now in an uptrend which will continue through 1952. If the inflationary trend has leveled off and the benefit levels are not appreciably increased, the economy programs and conservative underwriting practices may produce more favorable results in 1952 compared with the two previous years.

SURETY EXPERIENCE MADE POOR SHOWING

Surety experience likewise made a very poor showing in 1951. The ratio of defaults jumped 75% in 1951 over 1950, and the number of completion failures and total liabilities involved steadily increased during the year. With the expansion of construction activity, there came a corresponding demand for contract bonds for all types of public and private projects. Suretyship actually is more like banking than the normal insurance operation. The banker lends money; the surety lends credit and guarantees the contract will be performed according to its terms and, in most cases, that the cost of labor and materials will be paid. The rapid increase in the price level since mid-1950 made it impossible to complete many of the contracts awarded before the Korean war at anything approaching the original contract price. Losses now appear to be leveling off, and, with the benefits of realizable salvage, a more normal experience may be in the offing. Fidelity lines have also been showing unfavorable results, and claims and losses due to dishonesty have been rising. Increased taxes and high cost of living have created temptations and a weakening in public moral fiber with a resultant increase in defalcations.

It would be fair to ask at this point whether there are not hopeful elements to offset this rather gloomy picture. The accident and health field may provide the answer. This segment of the industry has consistently shown a profit for many years. Not since the late years of the depression has the industry as a whole shown a loss in this line.

Although practically all stock casualty companies are qualified to write accident and health insurance, and most of them do write it, not very many have developed the line to any great degree. With most of them, it is distinctly a side line, and the ratio of accident and health volume to total business written is apt to be small. In such companies, the profit from accident and health operations has only served to reduce somewhat the loss sustained on other lines. This fact has not gone unnoticed by the industry. More and more casualty companies are beginning to stress the development of accident and health coverages. Quite a few life companies have recently entered the field, chiefly to write group accident and health. With the passage of so-called "multiple-line" laws in many states, we are now seeing an increasing number of fire companies making their entrance into the hitherto prohibited casualty field by way of the accident and health lines. All this will undoubtedly have a profound effect on the accident and health industry. Apprehension has been expressed in many quarters that the increased competition offered by these newcomers may reduce or even wipe out the profits previously characteristic of this branch of the business. I am inclined to feel that these fears are overly pessimistic.

ACCIDENT AND HEALTH BUSINESS COMPETITIVE

The accident and health business has always been highly competitive. In addition to the multiple-line companies engaged in it, there are a great many companies, both stock and mutual, that write accident and health alone. The total number of companies in the field, including the nonprofit hospital services, probably approaches 1,000. All of these companies compete strenuously for business and are highly resourceful in their efforts to get it. The relative lack of regulation by state supervisory authorities in this field results in a far lesser degree of standardization of forms, rates, and so on, than in the causalty and fire branches, and permits a much greater flexibility and freedom of action. This, in turn, puts a premium on imagination and ingenuity, and the successful companies in the accident and health business have always been those who possessed these assets in the greatest degree. The entrance of newcomers to the field, therefore, may well intensify the competitive situation, but it can scarcely introduce any new factors.

There have been "crises" of this sort before in the his- ory of the industry, and the dire predictions of disaster ave each time been completely refuted. When the first vorkmens' compensation laws were passed in this country, n the period from 1910 to 1914, it was freely stated that hey would adversely affect the growth of accident and ealth lines; yet they proved to be the first great stimulus o their growth. Similarly, the formation of nonprofit as- ociations to write hospital insurance was thought by many o sound the death knell of such coverage written by profit- eeking enterprises. Yet some companies have had their reatest success in selling hospital insurance since the start f such associations, and that success shows no signs of bating as yet.

The reasons for this are probably obvious to you. The ide application of workmens' compensation laws, the rowing popularity of nonprofit hospital insurance, and the ntroduction of other measures such as the social security rogram, have all acted to educate large segments of the opulation to the need for, and desirability of, various orms of accident and health insurance. In other words, hese apparently formidable competitive measures have one a promotional job for the industry better than the in- ustry could do for itself, and in the end have simply served o broaden the market for all. We have no reason to be- eve that the entrance of new companies into the field will ave any other result. We know, moreover, that the acci- ent and health field is perhaps the most undeveloped in he whole insurance industry. Not only are large numbers f people wholly without the so-called "orthodox" cover- ges which have been available for years, but there are al- o whole areas of new coverages, the surfaces of which ave scarcely been scratched. There is a tremendous po- ential ahead for this branch of the casualty industry.

I may be accused of oversimplification in my conclusion. owever, I would sum up the casualty situation as follows: ll general casualty lines are very vulnerable to further nflation. In the final analysis, casualty company earnings, n most cases, will be determined by auto public liability nd property damage underwriting results. Without addi- onal rate increases this class of business can earn little or o return for stockholders. Under continuing inflation- ry conditions, there is reason to question the future of rivate enterprise in the automobile insurance field. Work- ens' compensation, fidelity and surety, and other general ability lines should produce somewhat better results in 952. The accident and health field should continue to rovide a broad vista for expansion of sales and earnings. his is the casualty situation as I see it. *(Applause)*

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Chairman Jones: Thank you very much, Dick.

For the life division of the industry, the discussion will e presented by Mr. Horace W. Brower, president of the ccidental Insurance Company. The record speaks for it- elf as far as Mr. Brower is concerned, both his personal ecord and the record of the Occidental Insurance Compa- y, as many of you know. Ladies and gentlemen, Mr. rower, who will speak on "The Outlook for Life." *(Ap- lause)*

* * *

Horace W. Brower: My first problem in preparing to talk to you today was a conversion job in my own approach to the subject of life insurance. For many months I have been talking to life insurance salesmen. They thrive on optimism, enthusiasm, imagination.

Here in this group I suspect that realism is the watchword. I think you will be interested not in the enthusiastic approach with which we bring our products to the public, but rather, the zealous, impersonal, calculated approach we bring to our stewardship of the policy holder's financial interest once he has bought a life insurance contract. There is a place for enthusiasm and optimism in our business and a reason for having both, but I would not want to paint you gentlemen a picture so rosy that I could be accused of making some of you dissatisfied with your own chosen calling. So today I put on my investment hat and lay aside my salesman's fedora.

Giving you a very broad picture of our business as it relates to yours presents the same problem as putting the Lord's Prayer on the head of a pin. Twenty minutes is not enough time, and so I have chosen the capsule approach. I will try to give you a television viewer's quick glance at selected areas.

PICTURE OF GROWTH AND PROGRESS

But first, a quick picture of the growth and progress of life insurance. The business is over one hundred years old, but the great growth has been in the last half century, paralleling the Nation's great growth in commerce, industry, and productivity in that same period. For the life insurance business is of necessity tied closely to the Nation's economy. Factors that help or retard business in general likewise help or hinder the sale and administration of life insurance.

There were only $7½ billion of life insurance in force in 1900. From 1900 to 1940 it increased to $115 billion. This figure includes all forms—individual policy or ordinary insurance, industrial or weekly collection insurance, and group. But in the single decade from 1940 to 1950 life insurance in force increased $119 billion to $234 billion. In that ten years the increase was greater than in the preceding forty. As of January 1, 1952, life insurance in force in the business had been brought up to an estimated $261½ billion.

These are impressive figures. They represent real progress in themselves. Yet we can take little comfort from them. For look what we see when we relate them to other facts While we were racing down one track at 90 miles an hour, the inflation train was coming down the parallel track at a faster clip, and we have actually not kept up with it.

The average income of an American family in 1940 was $2,300 and its life insurance in force was $3,300. The family was thus insured for about 1½ year's income. By 1950 we had boosted life insurance in force per family to $5,100. But average family income by then had climbed to $5,400. Relatively we weren't doing so good a job. In ten years our ratio of insurance in force had decreased from about 1½ times the annual family income to a little less than a year's income.

Were we slipping? Not at all. We had competition.

The average American family wasn't becoming less well insured. It was having its insurance provided by Government. In 1940 when we had $115 billion in force, there were only a few billions in force under Government plans—largely the remnant of service insurance from World War I. But the next ten years saw the tremendous sale of National Service Life Insurance plus the addition of survivorship benefits under the Federal Old Age Pension system. In ten years, from 1940 to 1950, about twice as much insurance of one form or another was placed in force by act of Government as we, the private companies, were able to do with our very able sales forces.

I shall not take time to comment on the social and economic effects of Government competition in our business. What I want to point out is this: The American family actually does have more life insurance in force than it did ten years ago. It has perhaps two times its annual income or better. But less than half of this life insurance is in private hands.

What this proves is the tremendous capacity of the American market to absorb life insurance. We believe that market is by no means saturated now in spite of the tremendous Government intrusion into it. Life insurance is bought, not because someone is going to die, but because others are going to live. Two years' income doesn't provide for their living very long or very well.

MARKET STILL AN EXCELLENT ONE

Sales themselves attest that the market is still an excellent one. The year 1950 was the record to date with total private sales of approximately $30 billion, but 1951 was good too. It was a smaller sales year than 1950 only because of the wage and salary stabilization restrictions on the extension of group coverages, and 1952 is starting out well ahead of the same months last year. At the present rate it will be the best year yet. The market then is still a vast one.

What has happened on the investment side? In the administration of private life insurance we collect billions of premiums annually to invest in the interest of policy holders. I need not tell you gentlemen what a material effect the handling of these funds has on the investment picture.

Roughly speaking, the total assets of the companies have grown in about the same proportion as business in force. Their total was about $30 billion in 1940 which more than doubled to over $60 billion in 1950. The 1951 year-end figure is estimated at $68½ billion.

If we project the continued growth of sales and business in force as I have already done, barring greater Government intrusion into life insurance, then we may logically project about the same proportional growth in assets and funds to invest. This assumes no major changes in the nature of the market, although there are factors at work that might affect the rate of asset increase.

Most important is the current tendency for people to buy life insurance primarily for protective purposes—for its survivorship benefit—rather than for investment and accumulative purposes. There seems to be a pronounced trend in that direction just now, fed by several forces. Their experience with National Service Life Insurance taught about 10 million Americans not to be afraid of term insurance properly used. Term insurance is all survivorship benefit and has no element of investment or accumulation for the buyer.

LESSENED ABILITY TO ACCUMULATE

Inflation has lessened the ability of many Americans to accumulate. Some who can still afford life insurance for protection can no longer use it as a thrift form as well. Others with the capacity to have and invest prefer to use life insurance for indemnity only, while concentrating their investments in equities which can improve as inflation mounts. The increased retirement benefits under Social Security, plus retirement benefits provided through industry pension plans, have likewise lessened the emphasis on investment types of policies.

METHODS HAVE PROGRESSED

Last of all, life insurance selling methods have progressed. We no longer sell just a policy. We help a man survey his entire insurance needs. This raises his sights as to the amount he must own to do his job. If he cannot buy that much insurance on high premium plans, he buys the same amount on lower premium plans with less element of savings in them. Such plans require lower reserves and generate less assets.

If this buying trend continues long enough and goes deep enough, it would mean some lessening in the ratio of asset growth to business in force growth. However, one might guess that there will be little change in the ratio—that sales and in-force figures will grow greatly, and that asset figures will do likewise.

INVESTMENT OF CURRENT ASSETS

Now let us talk about the companies' current assets, and how they are invested, and what seem to be the trends. Here are February 29 figures representing companies that have 88% of the total assets. Their total was $60,200 million which was a 6% dollar increase in one year.

Bonds accounted for $36,400 million, or 60% of the total. The next largest amount was $16,300 million in mortgages, or 27% of the total. Stocks were $1,700 million, or 3%; real estate was $1,400 million, or 2%; and cash was $800 million or 1.4%. All others, including policy loans, totaled $3,600 million, or 6%.

WHAT WERE THE TRENDS?

Now what were the trends? The year's increase in the bond portfolio was 1%. The year's increase in the mortgage portfolio was 19%. Real estate increased 11% during the year and stocks 6% over the prior year-end totals.

MOVEMENT TOWARD REAL ESTATE

The significant thing about these figures is the movement toward mortgages and real estate, induced, no doubt, by the scarcity of yield-producing quality bonds. Stocks continued to be ignored by a large segment of the industry, in spite of enabling laws which permitted companies domiciled in New York to acquire a limited quantity of such investments. I will come back to this important part of the portfolio in a minute. First let me outline what apear to be the probable near-term investment policies of he life insurance companies. They look something like his:

1. A lack of interest in long-term Government obligaions unless the Government should come out with, say, twenty-five-year bond with a 3% coupon available to rivate corporations (not banks). At the moment this loes not seem an early prospect with the Government isuing bills for increasing amounts each week at a rate of round 1.6%.

2. A continued search for yield in quality corporate isues and private placements of good yield and quality.

3. A much larger investment in real estate loans and n real estate held for investment. This category, as you now, is largely a postwar development. Should the Govrnment change its attitude toward the interest rate on HA and G.I. loans to permit an increase of one fourth or ne half of 1%, there would be a very definite and rapid novement toward the insured type of loan.

4. Further use of quality common stocks as a hedge gainst rising costs in an inflationary period. Our insurnce obligations are largely in fixed dollars, but operating xpenses must be met in currency of the day. The initial nterest shown in common stocks by life insurance compaies and other financial institutions has resulted in an inrease in the popularity and the price of a few selected isues. This price is no doubt considerably higher than it night have been in the absence of such demand. As a life nsurance man it occurs to me that there is a real need for vork on the part of investment analysts in searching for ommon stocks of corporations having substantial unrecogized intrinsic quality which do not already have a "halo" laced around them pricewise. Intelligent use of the comnon stocks seems to afford one approach to the problem f expenses, and here I think you will be interested in the xperience of my own company.

HAS HELD COMMON STOCKS

Occidental for many years has held common stocks in its portfolio. Their dollar amount was roundly 6% of total ssets at the end of 1951. Though I cannot quarrel with ny fair law or regulation designed to protect policy holder funds, I believe there is a strong case for properly selected and supervised common equities in reasonable amounts, and our experience would support that belief.

Here was our experience with common stocks in the twenty-year period from 1929 through 1949. The first common stocks were acquired in 1929, their book value at the end of the year being $254,000 which was then about 1.25% of the company's total assets. In the next twenty years we bought common equities in more than 220 separate corporations, divided as follows:

Industrials	140
Banks	46
Public Utilities	23
Railroads	12

TOTAL INVESTMENT $36½ MILLIONS

The total investment in these four categories over twenty years was about $36½ million. A number of sales were made which resulted in a profit on the operation. By applying net profit from sales, plus dividends received, to the mean amount invested each year, we arrived at a yield of approximately 8%. This yield compared very, very favorably with the yield on bonds during the same period.

You will note also that this twenty-year period covered a major depression, a recovery period, a recession, a war, a boom, and a postwar period. These results are one reason for my personal opinion that, in the absence of an early depression, there will be some movement toward common stocks in well-selected companies and for modest amounts by life insurance investment men.

A SOUND FUTURE

I have thus far indicated my belief that the life insurance business has a sound future. That means a continued growth of our assets which, in turn, means a continued growth of our investment activities. I have tried also to indicate some probable trends in the investment practice of the business so far as that can be foreseen. Though there are investment problems, we are solving them, and this is attested by the upturn in net earnings for the industry as a whole during the last several years.

FUTURE OF NATION'S ECONOMY

However, I would temper my optimistic views by recalling what I said earlier in this talk—that the future of life insurance is tied in with the future of the Nation's economy. I know that you, as much as any group in this country, realize the necessity of sound Government monetary policy, a policy of fair taxation and a policy of living within our income as a Nation. If we are forced to cater to the insatiable appetites of hungry tax collectors on the national, state, county, and municipal levels, we may very well expect a stoppage or an interruption in the progress that might otherwise be ours. I also feel that, if our Federal Government continues to place undue emphasis on low interest rates, not only on Government borrowings, but also on FHA and G.I. loans, it may well produce a depressing effect on the entire economy.

LIFE INSURANCE STOCKS

Perhaps no discourse before this group by anyone in life insurance would be complete without some mention of life insurance stocks themselves as an investment. I approached this subject cautiously because I learned long ago the hard way that it doesn't pay to give advice to anyone on the purchase of common stocks, and especially to a group of investment analysts. There are, however, a few things I can say that may interest you.

There are not, as you know, too many stocks available today among front line stock life companies. Stocks in such fine companies as Aetna Life, the Travelers, the Connecticut General, and the Lincoln National *are* available but at yields ranging from less than 1% to 3%. Since the yields are low, one naturally looks to the growth possibilities. Here we hit a stumbling block.

AFFECTED BY SEVERAL FACTORS

Profits of a life insurance company are affected by several factors such as amount of new business written, mortality experience (which is generally a reflection of past underwriting), investment policies, and expenses. Any one of these factors can affect profits for good or otherwise. Time prevents discussion of all four points, but I will say a few words about new business written and suggest that mortality experience, investment policies, and the expense factor be looked into whenever you are considering life insurance company stock. These data are available from Best's Life Insurance Reports, Dunne's Reports, and other annuals.

VOLUME OF NEW BUSINESS IMPORTANT

The volume of new business a company is writing is important because, when a new policy is issued, most of the first year's premium is needed to pay agents' commissions and expenses. As a result, it is necessary for a company to establish first year required policy reserves from its capital funds. Therefore, if a company writes an unusually large amount of new business compared to its business in force in a given year, the drain on surplus will be such as to suggest smaller dividends to stockholders. The process is not unlike a "plowback" procedure in other types of industry. Though this reduces the amount immediately available for distribution to stockholders, it would definitely enhance growth possibilities. My personal opinion is that any of the companies named, being very ably managed and well established in the business, would present excellent long-term growth possibilities.

A REALISTIC PICTURE

In closing may I simply say that I have attempted to paint a realistic picture of the outlook for "Life." If the picture has seemed somewhat optimistic—that was my intent for I am a firm believer in the American free enterprise system, and I am sure that means will be found to overcome our Nation's difficulties. We cannot afford the luxury of a "do nothing" attitude, however, for that is exactly what those in power want and expect. I know you have heard this before, but I am going to say it again. If life insurance is to continue as a power for good, it is essential that we in the business, and our policy holders as well, resist with all our force the unsound practices of lawmakers and administrators and the departure from things that have made this country great. *(Applause)*

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Chairman Jones: Thank you, Mr. Brower, for a most interesting discussion.

Let us go right on with our next speaker who is Mr. Shelby Cullom Davis of Shelby C. Davis Company, New York. He will give us a summary of the insurance industry, and, knowing what a fine analyst he is, I am sure he will have many interesting things to tell us. *(Applause)*

* * *

Shelby Cullom Davis: A new insurance underwriting cycle may be in the making. I do not believe it is generally realized that last year was the second poorest in over-all fire and casualty underwriting results in the past thirteen years of war and inflation since 1939. Interestingly enough the worst year in the past thirteen occurred just five years ago, in 1946, and it is a historical fact that insurance underwriting cycles frequently run in five-year intervals.

For example, the underwriting profit margin of 228 stock fire and casualty insurance companies last year was only 3.3% of earned premiums. In 1946 the margin was only 1.2%, which represented the poorest showing not only in the past thirteen years but in more than two decades as well.

FIRE EARNINGS COMPARE FAVORABLY

Fire earnings are comparing favorably this year to a year ago, Nation-wide losses being up only 1% during the past two months, whereas earned premiums have increased 4 or 5%, thus decreasing the loss ratio. In extended coverage the companies are having a substantially better experience due to the fact that in 1951 they had to contend with an unexpectedly large carry-over of $75 to $80 million from the Thanksgiving hurricane of 1950. Though ocean marine has not been good this year owing to severe winter storms and several crackups on the seas, other fire and allied lines have been profitable so that the over-all fire picture is good.

PENDULUM MAY BE TURNING

In casualty there are signs that the pendulum may be turning. Last year was one of the most catastrophic the business has ever seen. The culprits, of course, were the automobile lines, both bodily injury and property damage, as well as workmen's compensation and general liability to a certain extent. There seems to be considerable pessimism at the moment about automobile lines. However, several companies have privately reported considerably better experience during the first quarter than a year ago, and, although this is not universal, it would appear that a turn is near at hand. The National Bureau of Casualty Underwriters has publicly announced that it will seek further substantial automobile rate increases within the next thirty days—and these increases, coupled with what appears to be a cessation of inflationary pressures, should put the automobile lines in the black. Workmen's compensation rates are being increased in various states as are general liability rates.

PROFIT DURING THE 1930'S

In these days of pessimism about the automobile lines it seems to be forgotten that they produced an aggregate profit of 2.7% during the decade of the 1930's which was also inflationary. The loss 1945–50 has been an average of no less than 11.5%, but corrective measures are being taken along many lines, and there is an old adage in insurance that there is "nothing that rates won't cure."

Admittedly whether we are entering a new upward cycle of insurance earnings depends primarily on the course of the inflation during 1952 and 1953. If the crest has been reached for the time being so that commodity prices will remain within a narrow range during the next several years, then the stage would seem to be set for another dynamic increase in insurance companies earnings which have been in a downward phase since 1949.

What would be the potentialities of this insurance earnings cycle? If insurance underwriting earnings of both re and casualty companies simply return to the average f the past thirteen difficult years of war and inflation, a rofit margin of 6.0% would be attained which would rep-esent an increase in underwriting profits of no less than 0%. This would mean that underwriting profits would ncrease from the $177 million of 1951 to $321 million.

However, it would be distinctly unusual if insurance un-erwriting profits stopped there, just as the trough of an nderwriting cycle is well below the average. Should the eak in the coming insurance underwriting cycle only reach he average of the five best years in the past thirteen years which does not seem an unreasonable assumption), then he underwriting profit margin would reach 8.8%, and nderwriting profit would increase 167% from the 1951 evel—and to a figure of $470 million from $177 million. hat is surely an objective well worth striving for.

During the course of the next cycle, should the under-riting profit margin reach the peak figure of the last cycle r 12.4% attained in 1949, then the rise in insurance un-erwriting profits would be no less than 277% from 1951 nd would reach $663 million. This would represent the aximum objective and would probably be attained only ith extreme good fortune, such as dearth of catastrophes.

Whether the minimum objective is gained of an 80% icrease in underwriting profits or the reasonable "citadel" opples of a rise of 167% in underwriting profits, the out-ook would appear to be highly favorable at a time when ost industrial earnings seem to be trending downward. he change from an inflationary psychology to one of "wait nd see" if not recessionary prices is also bound to be fa-orable to the insurance group. Since the outbreak of hos-ilities in Korea, investors have turned their attention to nflation-hedge shares, and insurance stocks have been neg-ected. In a strong technical market position, they should ave considerable appeal at this juncture to investors who re looking for companies that would benefit from a de-ationary trend.

THREE ENORMOUS PROBLEMS

As I appraise the outlook for the American economy for he next few years, I am conscious of three enormous prob-ems: labor, inventories, and overcapacity. Already many usinesses are burdened with either one or a combination f these factors and after the great capital goods boom of he past nearly seven years it would be surprising if indus-rial plant capacity had not in many cases overtaken de-nand. The insurance business, however, is faced with one of these problems. There is certainly no labor prob-em as the mass productions industries know it, although here is, of course, the same white-collar problem that anks and other financial institutions have. There is no pecter of the falling market and what it could do to in-entory—because there is no inventory. Actually a decline n commodity prices would enable insurance companies to ettle their outstanding claims at reduced costs—and this vould be favorable. And as for overcapacity, it can cate-orically be stated that none exists in the insurance busi-ess; in fact there is an undercapacity if anything. Insur-nce seems well insulated against the major problems that usiness faces during the years immediately ahead.

There is furthermore the great tax advantage that insurance shares enjoy and that seems so seldom to be mentioned. The other day I received an advertisement about a book by a well-known specialist which indicated the tax savings that might accrue from owning a citrus fruit grove, watching your fruit gradually ripen on the bough (so to speak), and eventually selling the grove for a capital gain. Similarly with a herd of cattle. But why eastern investors, far removed from such esoteric fields, should go in either the fruit or cattle business when there are insurance stocks is difficult to see. Certainly a 'blue chip" such as Hartford Fire yields only 2¼% at current market, but the capital growth based on last year's subaverage earnings was 7%. The yield on Springfield Fire & Marine of 4.35% is less than a high-grade public utility, but then the capital growth, again based on last year's subnormal earnings, was nearly 9% based on current market. With high income taxes prevailing it seems far sounder for an investor to take a small yield and have his capital grow than to receive a larger return, such as from public utilities or bank stock investments, and have much less growth. Freedom of insurance companies from section 102 of the Treasury is also helpful. The state insurance commissioners have taken a strong position that insurance company surpluses should be allowed to grow as further protection to the policy holders.

WHICH GROUPS WILL PERFORM BEST?

Which insurance groups will perform the best during the remainder of the year? The "blue chips" have been bought continually by the pension funds and other professional buyers during the past two years so that, though they are attractive on a longer-term basis, their market prices are not particularly out of line with their underlying values. However, the good-grade companies have been neglected market-wise and have been virtually friendless since the spring of 1950. Some of these stocks, such as Fire Association or Aetna, are selling nearly ten points below prices achieved two years ago. Meanwhile their investment incomes have increased 25 to 30%, as have their liquidating values. Yields of 4 to 4½% can be obtained in the "good-grade" group — and I think that this yield will be sufficiently attractive to entice investors who have substantial profits in other groups whose outlook is less attractive.

FAVORABLE FOR EXPANSION

In the past when insurance stocks of sound companies could be purchased at 10 to 13 times investment income alone and at discounts of 30 to 40% from liquidating value a long-term buying point had been reached. This is true in many good-grade insurance stocks at the present time. The general national economic situation would seem to be favorable for an expansion of insurance company earnings, so that the group gives promise of moving out of its restricted market range during the months ahead. *(Applause)*

* * *

Chairman Jones: Thank you, Mr. Davis.

It is just about time for our stock market luncheon, so we will adjourn the meeting.

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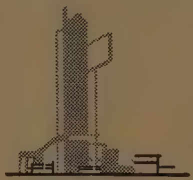
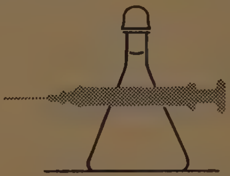
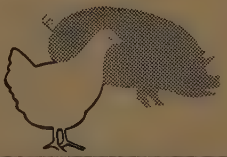
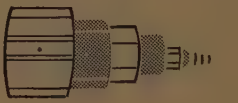
 **INDUSTRIAL CHEMICALS** Butyl, Ethyl & Methyl Alcohols & Derivatives—Nitroparaffins & Derivatives—Riboflavin, U. S. P.	 **PHARMACEUTICALS** Antibiotics—Penicillin & Bacitracin, Veterinary Products, Hypotensive Products, Lipotropic Agents, & Blood Volume Expander	 **AGRICULTURAL CHEMICALS** Commercial-grade Ammonia, Nitrogen Solutions, Insecticides—Benzene Hexachloride & Dilan®
 **ANIMAL NUTRITION PRODUCTS** Antibiotic Feed Supplements—Baciferm, Duoferm & Penbac, Vitamin Feed Supplements—Riboflavin & Choline	 **AUTOMOTIVE SPECIALTIES** Peak® & Nor'way® Anti-Freeze, Radiator Chemicals & Other Automotive Products	 **POTABLE SPIRITS** Neutral Spirits & Whiskies; Rackhouse Barrel Storage

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At the speakers' table of the stock market luncheon *(left to right):* Paul Pflueger, Jr., of Fireman's Fund Insurance Company, Chairman Philip J. FitzGerald, and Speakers William F. Edwards, Harry D. Comer, and Lucien O. Hooper

Stock Market Luncheon

TUESDAY NOON, MAY 6, 1952

PHILIP J. FITZGERALD, Dean Witter & Company, San Francisco, presiding.

Chairman FitzGerald: Before we start the meeting proper, I would like to introduce our guests at the head table, ladies and gentlemen. Mr. Jack R. Laznick of Crowell, Weedon & Company, Los Angeles. Next to Mr. Laznick is Mr. Ronald Brindley of Doremus & Company, who has worked on a lot of our publicity and has helped to write the very attractive letters to those in the East that brought a lot of you to us. Next is Taylor Peery of the Bank of America. Next is Alfred B. Post of Shearson, Hammill & Company of Los Angeles. Passing over the speakers, on my right is Paul Plueger, Jr., of Fireman's Fund, who has helped so much on the Pacific Northwest trip. Next, Joseph Edelstein of Mitchum, Tully & Company. Joe is in charge of the special Pullman car to Los Angeles on Thursday, and he will meet you out in the lobby after this session if you want more details about that particular trip.

Next to Joe Edelstein is Carl Schick of the San Francisco Stock Exchange who is our publicity chairman. I can tell you that he has done a magnificient job with the press here at the Convention. Next, Dick Link of Los Angeles. He would like to make another talk about his L.A. field trips, but he can catch you in the lobby.

Now I will turn over this rostrum to Walter Podolak for a short moment, as he has a couple of announcements.

* * *

Walter Podolak: There seems to be some confusion about the Richfield Oil trip to Cuyama Valley. The airport bus will be out in front of the hotel at 7:40 Thursday morning, and leaves at 8. The take-off time for the plane is 9. So I urge you to be prompt because the trip will take the whole day. Another thing is that luggage on the trip will be taken care of by the plane people. Please make that note. We still have about 10 vacancies, if anyone would like to go. It is a free trip to Los Angeles by plane. I think you will enjoy it. We have openings in some of our other field trips. We would like you to sign up in the lobby right after this luncheon so that we are completely set before we go to Los Angeles. Also, there are 35 of you who have not received tickets for the dinner in Los Angeles. After this luncheon will you please go to the registration desk and get your dinner tickets, if you are going to be there? Thank you. *(Applause)*

* * *

Chairman FitzGerald: I have been asked to put in a pitch for that fine trip beginning Friday, that magnificent trip to the Pacific Northwest. There are still available some reservations for the trip to the Northwest, which is probably the greatest single investment ever offered to analysts. Please see Herbert Drake in the lobby. We are fortunate to have him in charge. Now let us hear from General Chairman Dick Lambourne.

* * *

Richard W. Lambourne: In opening this traditional stock market outlook forum, I would like to call particular attention to the two press tables we have in front. We welcome the members of the press here and want to extend to all of you our thanks for the wonderful job you have done in giving us coverage for this Convention. *(Applause)*

I have a personal tribute to make to a former San Francisco Society President. I have a wire from Mr. Thomas J. Tasso of Walston, Hoffman & Goodwin in New York City.

> My sincere best wishes for a very successful Convention. Sorry I am unable to be there to participate in what started out as just an idea. Regards to all of you, Tom Tasso.

He was one of the first who had the idea of bringing the Convention to San Francisco. I am very glad indeed to read this cordial wire from him. *(Applause)*

With respect to the Los Angeles Society events com-

Table 1. Dow Jones Industrial Average
1951-52 versus 1939

For each share of the following 8 stocks in the average in 1939, there were 2.3124 shares in the average in April 1952 (also in December 1951):

AC, T, AT, CFG, GE, GF, N, Z. (These are the stocks having had no splits in period 1939-51 and to April 1952.)

Dropping the divisor used by Dow in computing the average (from 15.1 in 1939 to 6.53 now) is tantamount to increasing holdings of each 1939 share to 2.3124 shares in 1951. (15.1 divided by 6.53 equals 2.3124.)

Similar computations for the other 22 stocks show:

No. of Shares in D-J Ind. Avg., Dec. 1939	Stock Symbol (and Split)	No. of 1939 Equiv. Shares in D-J Avg., Dec. 1951[a]
1	UR (split 6 for 5)	1.9270[b]
1	PG (split 1.5 for 1)	1.5416
1	C, GM, GT, SD, J, TX (split 2 for 1)	1.1562
1	AR (split 2.4 for 1)	0.9633
1	BS, HR, JM, LW, DR, NS, UK, X (split 3 for 1)	0.7708
1	ACD, DD, S, WX (split 4 for 1)	0.5781
1	EK (split 5 for 1)	0.4625[c]

[a] Also in April 1952.

[b] Computed by taking 5/6 of 2.3124. (Derivation and meaning of figure 2.3124 is explained above.

[c] Computed by taking 1/5 of 2.3124. Similarly for other data, using appropriate split ratios.

See Table 2 for proof of validity of "weights" shown above.

ing up on Friday and Saturday, I merely want to say again that they have some wonderful tours and a fine dinner planned. We have some of their members on the platform here, but there are others who have worked very hard for this Convention — George Pflugfelder, Jock Thompson, Ernest Ach, Al Drasdo, Olaf Lighthill, Hartley Smith, just to name a few. They have done a great job.

We are happy to have here at least two of the program chairmen of previous Conventions in New York; Jeremy Jenks and John Childs. Also we have Sid Lurie of the 1951 Eastern Regional Convention and Lin Savage, who was the 1951 chairman of the New England Regional Meeting.

In introducing to you the very fine program chairman of this Convention, Phil FitzGerald, let me tell you that he is one of the few Irishmen who spells his name with a capital G. It is important. Be sure to put that capital G in. I will now turn the meeting back to Phil. *(Applause)*

* * *

Chairman FitzGerald: A capital G in FitzGerald makes it better Irish. A lot of Irishmen have dropped the o's and Mac's off the name, but I am one who stays with the old sod.

Being program chairman was a lot of work, but being associated with the stock market forum is a lot of fun, at least for me. I have been in this game for quite a while, and I have seen a lot of people. I know people in banks and insurance companies, as well as in the markets of trade with which we make our livelihood. I can advise all you fellows who are trying to make a living as analysts, you better have an opinion on the stock market wherever you go. If you are an analyst, the first question that will be asked is: "What do you think of the market?" Now, I wouldn't tell my associates or my customers that my opinion of the market presently didn't have a substantial certainty behind it. I am convinced by the men who talked last night. I can also promise you that, if you are consistently in error about the direction of the market, or your choice of stocks, you may be finding some other profession rather than that of an analyst.

Now, today we have three heroes. I say "heroes" advisedly, because I think making a forecast of the market in the year 1952 is a very difficult thing for anyone to undertake.

Our first talk will be by Harry D. Comer, partner of Paine, Webber, Jackson & Curtis of New York and Boston, both of those firms are Boston firms, and he is going to give his ideas of the market, based on the technical analysis of trading. I think we will all be interested, because, as I say we all have a stake in making a pretty rational comment when somebody faces us with that most vital but embarrassing question. Harry D. Comer! *(Applause)*

* * *

Harry D. Comer: Mr. FitzGerald, ladies and gentlemen, there is an old fable about three blind men in India. They were asked to feel of an elephant and then to describe it. The first blind man touched the elephant's side and said: "Why, an elephant is just like a wall." The second blind man took hold of his leg, and said, "An elephant is like a tree." The third blind man happened to grasp the animal's tail, and he described an elephant as "Just like a piece of rope."

We stock market analysts in trying to peer into the future are something like these blind Hindus. At times, some of us "feel" of the market and report that it is like a tree. (Does that mean it is going to grow toward the sky?) Others of us may get the impression that the market is impenetrable, like a stone wall, so to speak. (Are these folks the skeptics who cannot make up their minds — those who hedge or straddle the fence?) Still others may feel that the market is hanging by a thin rope, likely to bust any moment. (Are these the real bears?)

I do not care to press this analogy further now. Suffice to say that anyone's views concerning either an elephant or the stock market must be conditioned by his feel of the animal, his contacts with it, and the sense (or senses) that he uses in making those contacts and interpreting them.

All of us are blind enough when it comes to the future of the market. *(Laughter)* So, before we try to make any forecasts let us first take a good *backward look.* Where is the market now in relation to where it has been? We must know where we are before we can begin to know where we are going. That is fundamental in all fields, not just in the stock market.

THE MARKET — LOOKING BACKWARD

The stock ticker has been humorously described as an instrument used to measure the length of lamb's fleeces. Seriously, I would accept a different definition. To me, the stock ticker is a device used to separate the market's *past* from its *future.*

The latest tick of the ticker represents the ever-fleeting present. Very quickly the ticks of the ticker become part of the past—for us to feel of and report what we find, as a basis for projecting the future.

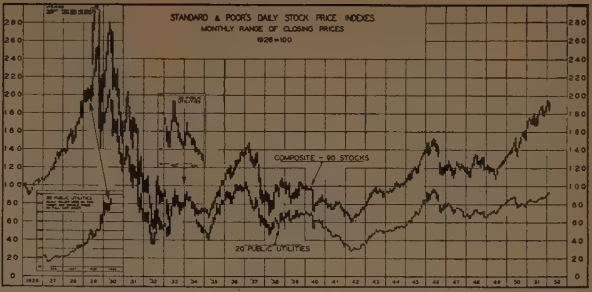
In order to see the forest instead of the trees, we analysts habitually use stock market averages, or indexes, which combine many stock prices into one figure for each date. First let's consider the

DOW JONES INDUSTRIAL AVERAGE

Here comes one of our blind men. He grabs the market by its Dow Jones industrial average. (He is typical of those thousands of market analysts who get their "feel" of the stock market by following this average.) Now, let us see what he knows about the market.

Ask him what the market did yesterday, and he will probably tell you "The industrials went up one dollar and 52 cents", or whatever the advance in the Dow average was. He thinks that each Dow Jones point is one dollar per share. He doesn't know that one Dow point is now only 22 cents per share, nor that it has varied all over the lot, was worth as much as 50 cents a share a few years ago. He doesn't know how limited his feel of the market is. *(How can anyone expect continuity in an average if the unit of measurement itself keeps changing?)*

Ask him where the market is now in relation to its 1929 high, and he will tell you that it is *far below that high,* which was 381 in the Dow. (Now it is only about 260.) Despite these figures, the real truth is that indus-



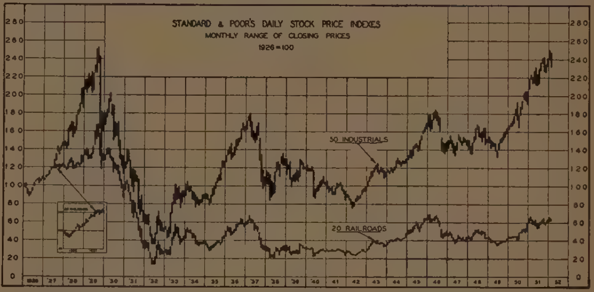


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Table 2. Dow Jones Industrial Average
Practical Verification of Weights Cited in Table 1

Mkt. Val. of 1 Sh. of Each, 12-30-39	30 Dow Jones Stocks	Mkt. Val. of 1 1939 Sh. of Each, 12-31-51	Mkt. Val. Weighted by No. of Shares, 12-31-51
$ 599.375	8 stocks, not split in 1939-51, AC, T, ATB, CFG, GE, GF, N, Z (Value of 2.3124 shares of each: 2.3124 X .	$ 591.75	$1,368.36
46.75	Split 1.2 for 1 (20% stock dividend), United Aircraft (Value of 1.9720 shares: 1.9270 X	37.95	73.13
66.00	Split 1.5 for 1, Proctor & Gamble (Value of 1.5416 shares: 1.5416 X	99.75	153.77
280.25	6 stocks split 2 for 1, C, GM, GT, SD, J, TX (Value of 1.1562 shares of each: 1.1562 X . .	697.50	806.45
50.75	Split 2.4 for 1 (combination of 6 for 5 in '47 and 2 for 1 in '45), American Smelting (Value of 0.9633 share: 0.9633 X	114.30	110.11
498.25	8 stocks split 3 for 1, BS, HR, JM, LW, DR, NS, UK, X (Value of 0.7708 share of each: 0.7708 X . .	1,087.50	838.24
560.375	4 stocks split 4 for 1, ACD, DD, S, WX (Value of 0.5781 share of each: 0.5781 X . .	1,053.50	609.03
166.875	Split 5 for 1, Eastman Kodak (Value of 0.4625 share: 0.4625 X	230.00	106.375
$2,268.625	Total 30 Dow Jones industrials		$4,065.460

$\frac{2{,}268.625}{15.1^*}$ equals 150.24 (This is the Dow Jones published average for December 30, 1939.)

$\frac{4{,}065.460}{15.1^*}$ equals 269.23 (This is the Dow Jones average as computed above for December 31, 1951, using weights shown in Table 1 and dividing by 15.1, same divisor as used by Dow in 1939. It checks exactly with the Dow average as published, which used one 1951 share of each stock and a divisor of 6.53.

*15.1 is the divisor used by Dow Jones in computing the average at end of 1939.

trial stock prices are very close to their 1929 highs. In fact, the 1952 high just about duplicated that of 1929, even for the 30 stocks now in this average.

Those of us who look backward and see prices so far above the present level are blind indeed. Moreover, *when we turn around and try to look forward, our interpretation of the future can be no better than our knowledge and understanding of the past.*

CONSTRUCTION OF THE AVERAGE

The trouble arises in the construction of the average—in the method used to adjust for stock splits. Dow Jones adjusts by *lowering* the divisor, when a split occurs. In the past dozen years, all but 8 of the Dow 30 industrial stocks have been split. The net result of all these splits, and the accompanying reductions in the divisor, has been unfortunate.

Let us not go into all of the arithmetic here. Suffice to say that, for each share of these 8 stocks in the Dow average in 1939, there were over 2¼ shares in the average in April 1952. These stocks are AC, T, ATB, CFG, GE, GF, N, and Z. At the other end of the list we find Eastman Kodak with each 1939 share shrunk to less than one-half share in April 1952. Other stocks lie in between these extremes with 13 of them less than one share. See Table 1.)

What Dow really does when it cuts the divisor at the time of a split is to retain one share of the new stock, sell the others resulting from the split, and *reinvest the proceeds in all of the 30 stocks on a pro rata basis.* Instead of increasing the holdings of a split stock, Dow cuts them down and then turns around and expands its investment in the unsplit stocks. *That, of course, is adjustment in reverse, and with a bang!* No wonder that many of us market analysts have sand in our eyes! (See Table 2.)

Another blind man comes stumbling along. Groping for a "feel" of the stock market, he grabs it by the

NEW YORK TIMES AVERAGE (25 INDUSTRIALS)

This average was started before World War I, in 1911. Obviously it is an antique model. Says the *Times* under recent date: "A simple arithmetical method has been followed in computing the averages in order to avoid the use of dangerous weightings."

Well, what are the facts today? In constructing the *Times* average of 25 industrials now, the price of duPont

Table 3. New York Times 25 Industrial Shares

Multiplier*	Stock	Closing Price, 3-25-52	Multiplier Times Price	Per Cent of Total
9	Air Reduction	25.875	232.875	3.25
4	Allied Chemical	71.75	287	4.01
6	American Can	125.25	751.50	10.49
1	American Tel & Tel	154	154	2.15
2	American Tobacco	58.625	117.25	1.64
3	Bethlehem Steel	49.25	147.75	2.06
5	Caterpillar Tractor	49.875	249.375	3.48
8	Chrysler	74.125	593	8.28
2	Douglas Aircraft	57.125	114.25	1.60
14	DuPont	84.75	1,186.50	16.56
5	Eastman Kodak	43.25	216.25	3.02
10	Firestone	58	580	8.10
4	General Electric	57.875	231.50	3.23
3	General Mills	57.5	172.50	2.41
2	General Motors	53.5	107	1.49
2	Ingersoll-Rand	83.5	167	2.33
1	Int'l. Bus. Machines	191	191	2.67
12	Int'l. Harvester	33.125	397.50	5.55
4	Int'l. Silver	58	232	3.24
3	Johns-Manville	68.5	205.50	2.87
3	Penney, J. C.	66.75	200.25	2.80
4	Sears Roebuck	53	212	2.96
2	Standard Oil, N.J.	75.75	151.5	2.11
3	U. S. Steel	39	117	1.63
4	Westinghouse Electric	37	148	2.07
	Total		7,162.50	100.00

Total 7,162.60 divided by 25 equals 286.5.
Published average March 25, 1952, 286.51.

Note right-hand column, "Per Cent of Total." Observe that Chrysler contributed more than 5 times as much to the average as General Motors; International Silver twice as much as U. S. Steel. American Can, with over 10%, counterbalanced all 5 of these big stocks combined: General Motors, American Telephone, U. S. Steel, Sears Roebuck, and Standard Oil, N.J. Obviously, these weightings have no rhyme or reason. They have no relationship to the importance, size, or value of the different companies.

*These are the multipliers (or weights) used by the New York Times in compiling this average.

is multiplied by 14, the price of Air Reduction is multiplied by 9, Allied Chemical by 4, and Eastman Kodak by 5 (and so on for others). These four chemical stocks account for 28% of the entire average (based on prices at a recent date). Think of it — more than one fourth of the average reflects only one industry!

Here is an even worse result. On a recent date, Chrysler contributed more than 5 times as much to the average as the mammoth General Motors.

That is not all; we find such crazy weightings as these in the New York *Times* average. International Silver is twice as important as U. S. Steel.* U. S. Steel itself is less important than Bethlehem; Firestone Tire is weighted 5 times General Motors. And; to cap the climax, one stock alone counterbalances these five stocks — General Motors, American Telephone, U. S. Steel, Sears Roebuck, and Standard Oil of New Jersey. What stock do you think it is? The answer is *American Can.* Why?

Talk about *"dangerous weightings." This looks pretty much like the blind leading the blind.* (See Table 3.)

NEW YORK HERALD TRIBUNE'S AVERAGE (100 STOCKS)†

Still another blind man comes along, with the New York *Herald Tribune's* average in his hand. He has two perfectly good eyes, but doesn't choose to use them. Rather he accepts what this average reveals to him about the market's performance and position, without knowing its limitations. No doubt he will be surprised to learn that this average is useless in measuring percentage changes in the market. He thinks the rise in this bull market since 1949 has been only 31%. Even the Dow Jones addict knows better than that. The average shows a 70% rise, or twice that of the *Herald Tribune.*‡

The difficulty here is, again, in the way adjustments are made for stock splits. The *Tribune* does this by the additive method. As a result, through the years, a large amount of *dead wood* has accumulated in the average. This is the average to buy if you want a defense against a complete washout in the market. If each and every stock in this average went to zero the average would still stand at something over 60. *(Laughter)* Obviously this is not an average at all. It is, rather, a balanced fund, with a large *uninvested* portion, amounting to about 60 *Herald Tribune* points.

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*International Silver has only 364,792 shares outstanding; total market value about $17 million. United States Steel has 26,106,756 shares, worth over $1 billion, or 60 times as much as International Silver.

†Includes 30 rails.

‡Dow-Jones: 1952 high, 275.40; 1949 low, 161.60; advance 70%.

Herald-Tribune: 1952 high, 149.44; 1949 low, 114.07; advance 31%.

THE MARKET—FORWARD

Is there no hope at all? No way to get a good look at the whole elephant? *Can't we even find out where the market is today in relation to where it used to be?* To do that job we need a market index (or average) which *really shows the changes in the fortunes of the mass of stockholders.* One that automatically takes care of stock splits, thus avoiding the errors in other market averages such as those I have just discussed. One that is free of unrealistic assumptions and unjustifiable weightings.

STANDARD & POOR'S CORPORATION MARKET INDEXES

The stock market indexes of Standard & Poor's Corporation are undoubtedly the soundest and most useful available. They are scientifically constructed, by weighting each stock price according to the number of shares outstanding in the hands of investors. Each index shows the total market value for any date in relation to the value in the base period.

A stock split is "duck soup" to Standard & Poor's. A split that halves the price of a stock doubles the number of shares, leaving the total market values unchanged. Therefore, these indexes are not distorted by stock splits. They give the best possible picture of the market from the technician's point of view. A penetration of a previous "supply area," for example, means what is says: namely, that all the stockholders combined are now better off (on paper) than they were previously.

Standard & Poor's provide a daily index of 90 stocks, subdivided into 50 industrials, 20 rails, and 20 utilities. There is also a very complete set of weekly indexes, containing a total of nearly 500 stocks. *In total market value these are equal to about* 81% *of the total value of all listed common shares on the New York Stock Exchange.*

A separate group index is published weekly for some 70 different industries. These industry indexes are invaluable to the market analyst, especially under conditions like the present, when there are so many different cross currents within the general market. These group indexes enable the analyst to compare changes already recorded by the market with the economic changes or trends he detects or estimates within a specific industry. In this way it is possible to make more intelligent projections of future market trends.

(Last year the *Securities & Exchange Commission* began publishing its own series of weekly stock market indexes. The Commission showed good judgment in adopting the basic method of Standard & Poor's, that is, weighting each stock price by the total number of shares outstanding.)

THE WHOLE ELEPHANT

Now to get back to our elephant. Here is the way the market looks to me, backward and forward, using Standard & Poor's indexes.

1. As a group, industrial stocks§ in 1952 slightly exceeded their previous all-time high set in 1951, which also exceeded the 1929 top. This fact is important. It is not just an academic matter. It means that the *psychology of the typical holder of the typical portfolio is favorable,* because he has a paper profit *no matter when he bought it.*
2. Since prewar (September 1939) the advance in industrials has amounted to 105%.§ Of course, that is measured in paper dollars. Adjustment to allow for the shrinkage in value of money brings this rise down to only 9%.
3. Obviously, the market has given very little response to other economic factors in this twelve-year period of war boom and postwar boom. On balance, there has been no speculation about the future — merely recognition that the dollar has fallen in value.
4. Industrials are now selling at only 10 times earnings, and dividend yields average 6%. Earnings could fall 20%, and prices at current levels would be only 12½ times such earnings — a low ratio in comparison with previous bull markets.
5. The oscillating pattern of the composite index during recent months probably includes allowance for a Korean truce, which has been dangling over the market since last July.
6. In general, the market appears to be on solid ground. At present there is no *convincing basis for expecting a major decline.*
7. On the other hand, there are so many divergent industrial trends within the market, as revealed by Standard & Poor's group indexes, that *the basis is also lacking for expecting a substantial upswing in general prices.* It would seem to require some important outside development, perhaps in the realm of inflation or the election, to generate any important broad swing in prices from here.
8. Several depressed groups may be about ready to swing upward, including motion pictures, apparel, and certain textiles. Right now some of the most promising stock groups appear to be these: *retail trade, farm machinery, fire insurance, automotive, oil producers,* and *electronics.*
9. These forecasts are tentative, and subject to change in the future, as investors continue to reveal their hopes and fears, their buying and selling preferences, through *Standard & Poor's stock market indexes. (Applause)*

* * *

Chairman FitzGerald: Thank you, Harry Comer! I may say that, even though Harry doesn't want to give you any idea of the market, he has enough groups so that everybody here could do plenty of business which is a broker's, we will say, prime concern.

Next is Bill Edwards, a former member of the New York Analysts Society, who is now dean of the college of commerce, Brigham Young University, in Utah. He is going to give us an economist's view of the outlook for stocks. *(Applause)*

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§ Standard & Poor's Weekly index of industrials:
1952 high, 207.5
(Base: 1935–39=100) 1951 high, 206.7
September 1939, 101.3
1929 high, 197.7

William F. Edwards: Mr. Chairman, ladies and gentlemen at this Convention, a great western educator once said: "We go east for knowledge, but some day they shall come west for wisdom." In that spirit we welcome especially those from Boston, New York, and other points east and hope that while here you will catch the spirit of the West. We may not be able to contribute much to your tremendous store of knowledge, but maybe we can help you sit back and see the economic panorama that is unfolding.

Time is one of our greatest assets. If it works in your favor, you can make "deserts blossom like a rose"; you can watch yesterday's frontier community become today's leading metropolis; you can overcome almost every obstacle and replace poverty with wealth. That is the magic medicine we depend on for success, and you see the accomplishments on every hand.

But today as we look from West to East, we are deeply concerned. In so many ways we see evidence of time working against our welfare as citizens and as investors.

FOREIGN POLICY

We are concerned about our foreign policy! We entered World War I in order to "make the world safe for democracy." While the poppies grew in Flanders' fields, trouble soon reappeared, and again we joined in World War II to "make the world safe for democracy." The second war was more destructive, the defeat of the apparent enemy was more complete, and what was accomplished? This time, almost before the poppies could be planted, we were fighting what might appropriately be called World War III.

If the Korean war were to stop tomorrow, it would have lasted longer than our participation in World War I and cost us substantially more. The world is not safe for democracy; even our own land is threatened from within.

We are concerned over the mistakes that we have made. Each of the wars has confirmed our great industrial power, but subsequent failures have indicated our lack of wisdom. Almost every acute problem in the international horizon is the result of errors that we have made during recent years.

MANCHURIA

Manchuria is the base from which the Communists overran China. It is the base from which our opposing forces are supplied in North Korea. And we agreed to Russia taking over Manchuria at the end of the war.

The division between East and West Germany is the cause of continued friction in Europe, and we are primarily responsible for this division. You probably remember how we stopped our troops in order that Russia could march into Berlin. Then later, as a "price" to occupy a section of Berlin, we withdrew our troops from much of Eastern Germany and turned this valuable area over to Russia.

We helped confuse the world in its thinking toward Communism by recognizing Russia in 1933 and thus giving Communism respectability. Again, during World War II, we preached to the world that Russia was one of the great democracies. Our attitude toward Russia before and during the war also confused people at home and encouraged many to embrace points of view that conflict with the principles that have made possible the development of this great Nation. Thus, there is concern that time is not working for us in our long-term efforts to establish peace and to help build a better world.

TAXES

In pursuing this questionable foreign policy—as judged by our record of failures — we are committing many acts that weaken the economy. Personal and corporate taxes have been raised to levels that are destructive. Each time a family of five sits down to eat a meal, they should put on the other side of the table three empty plates. These would represent the uninvited guests, the tax collector who has already consumed this proportion of the average income. A corporation earning $100,000 before the outbreak of Korea that has increased its pretax earnings to $200,000 would have to pay in Federal income and excess profit taxes about $138,000. There would remain in the hands of the owners of the business after all Federal taxes something like $20,000 to $30,000 that could be used for their own purposes. An indefinite continuation of present tax rates could undermine our way of life. *(Applause)* It could result in the very thing we are attempting to avoid. Karl Marx recognized this when he stated that to "tax, tax, and tax" is the way to destroy capitalism.

FISCAL POLICY

We are concerned over false concepts that exist regarding our fiscal policy. We are asured by many that we needn't be concerned over the level of Government expenditures so long as the budget is balanced. This is not true. If too large a proportion of national income is spent for defense, there can be inflation even though the budget is balanced. We are concerned when we see that money is being spent at a rate that is literally incomprehensible. If a conscientious citizen were to allot ten minutes to study the budget for each $1 million of appropriations and discontinued his job so that he could spend 40 hours per week reading the budget, it would still take him over seven years — and a new budget appears each year. We fear that, if this rate of spending is continued, we may help to bring to pass the prophecy of Lenin — the George Washington of Russia — when he stated: "Some day we shall force the United States to spend itself into destruction."

LABOR POLICY

We are deeply concerned over our labor policy. We now frequently attempt to resolve our labor-management problems as belligerents on the battlefield. The Communistic doctrine of class struggle has infested the minds of many. We seem to have forgotten that there is no basic conflict between labor and management. They are both members of the economic team, and neither is able to pull the load without the other. *(Applause)* The aim of both labor and management should be the same — to obtain increased rewards by producing more of what consumers want at lower cost. As against this, organized labor with the support of Government controls the equivalent of both the atomic and the hydrogen bombs, and frequently destructive explosions cause inflation and weaken the economy.

IMMEDIATE BUSINESS OUTLOOK

Turning now to immediate business problems, we fear that time is working against us in many important respects. After the outbreak of the Korean war, everybody attempted to buy everything before everybody else bought it. This was to be expected after the experience in World War II and the subsequent years of shortages. The troubles were accentuated by our national policy of expanding productive capacity to meet concurrently all the demanded "guns and butter," continuing to stockpile strategic materials during the months of strongest demand, and the Government's continual overexaggeration of the expected shortages.

The result was a most hectic period from which we are now suffering. Since the beginning of the year, prices of raw materials in general have declined about 12%. Many items — hides, burlap, tallow, shellac — are off 30% or more from their levels at the end of 1951. One third of the commodities in the Government's raw materials price index, notwithstanding sharp price increases after the outbreak in Korea, are now selling below pre-Korea.

We are now in the season when Government spokesmen proclaimed that inflationary pressures would be strongest and shortages greatest. But consumers are hesitant about buying, merchants are still trying to liquidate excessive inventories, production of some consumers' durable goods such as washers and refrigerators is being curtailed, two automobile companies have reduced prices during recent weeks, and some industries are in a severe deflation. Most ironic of all, some people are arguing against curtailing next year's armament budget in order to avoid a business letdown.

POSTDEFENSE PROSPECTS

There is justification for concern over what will happen to business when and as the defense program is curtailed. Only Russia might find comfort in claiming that "we planned it that way." We are creating a situation just the opposite of what existed at the close of World War II when there was a great vacuum of deferred demand that required maximum production for two or three years to satisfy.

We are carrying toward a conclusion an expansion program that will increase our productive capacity about 50% over 1946. Our steel-making capacity will have increased 30%; yet there is justifiable concern over the degree of expansion. From the boom year in 1950 to early 1953, our steel production capacity will have increased more than the maximum estimated annual needs for armaments. We will have enlarged our over-all plant capacity to where it requires concurrently a civilian boom and a defense boom to operate satisfactorily. Then, if the defense program is curtailed, as we hope and pray that it will be, there will go up cries of trouble.

Then, too, we are not creating consumers' deferred demands that will give support when needed. The increased allotments of materials is permitting automobile production at a level almost in balance with demand. It is estimated that the normal average increase in household units is about 700,000. Net replacements and conversions might increase the normal demand for new nonfarm dwelling units to near 800,000. One or two more years of constructing 1 million or more units, and the building industry could have passed another peak from which demand would decline, regardless of the ease of credit terms.

POSSIBLE FUTURE DEVELOPMENTS

We know it is usually not wise to become too disturbed about possible future developments. Most things causing concern usually do not materialize. And, when they do, they are frequently not so bad as anticipated, or we adjust to them without too much trouble. Nevertheless, my suggestion is that it may be wise to make investment decisions today that will be sound if these things come to pass. This does not mean running to the investment cellar. But it does mean appraising values and prospects very carefully. Preferred industries and securities during the past bull market may no longer be among the most attractive to hold or buy.

INVESTMENT OPPORTUNITIES

It would seem inappropriate for me to attempt to predict when the stock market will make a high or a low. However, we do well to remember this stock market "key." The day that the largest majority of people who deal in securities believe that prices will go substantially higher is the day the market will make its high. Conversely, the day when the largest majority of people dealing in securities believe that the stock market is going substantially lower is the day the market will make its low. This is another way of saying that stocks are a sale when they look best to most people and a buy when they look worst to most people. My opportunity to be helpful to you is to call attention to specific investment opportunities.

EXCESS PROFITS TAX

The 30% excess profits tax on corporations expires June 30, 1953. This means only another six to eight months until it is reconsidered. If business is less favorable, unemployment of some concern, and pretax earnings lower, this tax may not be renewed. There are companies whose earnings would be helped more by the elimination of excess profit taxes than would be hurt by lower general business. If their securities are reasonably priced relative to earnings and dividends, present and prospective, they could be attractive purchases.

CONTROLLING CORPORATE PROFITS

The legislation that was intended to give the Government power to stabilize wages and prices but is being used more as a means of controlling corporate profits expires June 30. Developments of the past few weeks should have a profound influence on the controls that will exist after that date. There are companies—such as some of the grocery chains—that could be helped more by this development than hurt by any likely business decline.

FLOOR-COVERING INDUSTRY

The floor-covering industry is having an economic Dunkirk. *(Laughter)* Sales have declined sharply, substantial profits have been replaced with deficits, and two of the leading companies have passed their common dividends. These companies are making the necessary adjustments, and their earnings should improve even though business generally declines.

TEXTILE INDUSTRY

The textile industry is experiencing its equivalent of the depression of the 1930's. It appears that sales are below the minimum rate of actual consumption. The prospect is for improvement, the only question being one of time.

The earnings outlook for the oil industry may become less favorable, and, in view of the past investment popularity of this group, one should appraise the industry cautiously, yet continue to recognize its unique position. In general, the leading companies have excellent and aggressive managements. They are favored by a firm growth trend in the demand for petroleum products. The nature of the operation and permitted accounting practices result in below-average Federal income taxes. Then, too, a regulatory procedure has been perfected that stabilizes prices. Through the instrumentality of the Texas Railroad Commission, production of crude is adjusted to demand so as to avoid the pressure of excessive inventories on prices. Thus, the long-term outlook continues favorable, and the near-term risk of earnings decline is relatively moderate.

RETAIL TRADE INDUSTRY

The retail trade industry has been going through a readjustment. Sales have declined moderately, but far more important has been the decline in profit margins. The industry has been faced with a difficult problem of liquidating excessive inventories, and in many instances margins have been reduced in an effort to attract shoppers. The stocks of a number of well-managed companies have declined to prices relative to present and prospective earnings that make them appear defensive during a period of readjustment and offer good long-term prospects.

INSURANCE STOCKS

Some of the insurance stocks could also be in a favorable investment position. This applies to both the fire companies and the casualty companies, although the record justifies greater confidence in the fire company stocks. The earnings outlook is improved by rate adjustments, and also because the lessening of the inflationary pressures lowers replacement costs.

These are only a few examples of seeking investment opportunities currently where time may continue to work in your favor or at least not work against you in event that some of the pending concerns materialize.

A NOBLE PROFESSION

You men are members of a noble profession, and your activities will have a profound influence on the future growth of this grand old land of ours. The ancient trademark of the savings bank is a beehive. To this beehive hasten the "depositors" with the nectar of the fields and the fruit of their toil. This is symbolic of the importance of savings.

50% OF OUTPUT OF MANUFACTURED GOODS

The United States with less than 7% of the world's population produces nearly 50% of the world's output of manufactured goods. Here the average workingman enjoys a standard of living not even dreamed of by kings only a few years ago. This is made possible by the investment of savings in plant and equipment. Our way of life is no more secure than the willingness and ability of people to save and to invest their savings wisely.

ENRICH THEIR LIVES

In helping people to invest their savings properly you enrich their lives. You are helping them to achieve the real security and experience the full blessings afforded by our great free enterprise system. And you are rendering a vital function in preserving our great heritage.

In practicing this noble profession, remember that honor must come above expediency—a good turn above unfair advantage. Adopt as your motto: "Do unto others as you would have others do unto you."

OUR GREATEST THREAT

Also remember that the Constitution of this great Nation was inspired and has been preserved by our Father in Heaven. This is a choice and blessed land where we enjoy liberty, freedom, and opportunity for individual growth and happiness unknown to most people in the world. Our greatest threat is not the atomic bomb or foreign enemies but our lack of faith and willingness to do what is necessary to preserve this way of life including helping to select, elect, and sustain worthy leaders in Government. Thank you. *(Whereupon the entire audience arose and gave Dr. Edwards prolonged applause.)*

* * *

Chairman FitzGerald: Bill looks eastward with philosophy and a great deal of penetration. I am sure everybody is grateful to him for his observations.

Now, as you know, a difference of opinion is supposed to be a great thing for the stock market or the horse races. I think that Harry Comer and Bill Edwards have a great similarity of opinion. When it comes down to actual investments, perhaps Lucien Hooper who is well known to all of us on the West Coast—we enjoy his comments printed at least twice a week in the *Wall Street Journal*—will supply an element of divergence. *(Applause)*

* * *

Lucien O. Hooper: Ladies and gentlemen, this is not an enviable spot. To follow Bill Edwards after his eloquent and thoughtful address is exceedingly difficult. Furthermore, I am somewhat in the position (although being from Maine instead of Vermont, and a male rather than a female) of the woman that you heard about here yesterday, who doesn't know what she has to say until after she says it! *(Laughter)* I have a manuscript, but I don't like manuscripts, and perhaps we will leave permission to print some of it.

SHOULD FIND WIDER RELATIONSHIP

In the first place, I think perhaps I should say that Mr. Comer's scholarly comments regarding the averages are something that should find a much wider relationship and attention than they probably will. Unfortunately for those of us who ply this trade, because our clients, our customers, and our public follow these Dow Jones averages, we have to continue to pay attention to them.

REFORM METHOD OF COMPUTATION

Now, our prayer is that the people who compile those averages will reform their method of computation, but, so long as these averages are here, we have got to use them more or less with all of their weaknesses. One other thing about Mr. Comer's remarks I would like to call to your attention: He says that arithmetically industrial stocks in the Standard and Poor's index are selling higher than they were in 1929. I am sure he didn't intend to leave the thought that stocks are as "high" as they were in 1929. They are different stocks. They represent more earning power, a greater dividend-paying ability, more book value. Most of these companies have much larger physical assets and a bigger participation in the economy.

ONLY HALF PROFITS PAID OUT

In the last few years, as you very well know, only about one half of all profits have been paid out in dividends. Certainly that additional earning power, those additional earnings plowed back into the property, deserve some recognition in the price of shares.

NOT SURPRISE ELEMENTS

I would not agree with all that Dr. Edwards has said. I don't think that all of his viewpoint from the West is necessarily the right one, but this is no time to argue about it here. All I would say is this: that you are conscious, or that the "market" is conscious, of most of these things that Dr. Edwards has talked about here today. They are not surprise elements. They are new things that are coming up in the stock market to change our thoughts and opinions. They are things that we have considered, things that we have thought about, and, ladies and gentlemen, the things that make big movements in the stock market are the surprise things, the things you have not thought about, not those that you have mulled over indefinitely. Perhaps you would like to have this "blind man" feel of the stock exchange elephant and give his impressions. I find it neither a wall, nor a rope, nor a tree. It feels rather like something animate, something many-sided — difficult to generalize about.

PAINTS WITH TOO WIDE A BRUSH

Much stock market literature tries to paint with too wide a brush. It is concerned too much with infrequent pathological extremes and not enough with usual and normal stock price behavior. Too many commentators, like most of their readers, always appear to assume that the market is going either through the floor or through the roof. Actually, except most infrequently, it does neither.

There have been only 3½ times during my thirty-four-year career, it seems to me, when the investor has been justified in selling everything: 1919, 1929, 1937, and the "half time" in 1946, when speculative shares, but not investment commitments, should have been sold.

LEADS TO INACCURATE STATEMENTS

The poverty of vocabulary to describe market phenomena often leads to inaccurate statements as well as a tiresome style. Such descriptives as "technical," "good buying," "bull market, "bear market," "speculation," "investment," "breadth," "accumulation," "distribution," and similar overworked words and phrases mean different things to different people, and often nothing at all definite even to the people who use them. In late years the word "selective" has become shopworn.

"SELECTIVE" POOR SYNONYM

It seems to me that this word "selective" is just a poor synonym for "sophisticated." Our profession will not give itself unearned credit if it asserts that investors have been educated to be more intelligent. Mass intelligence in the investment community, it should be recognized, is likely to occur inversely with the incidence of public participation. The so-called "public" obviously has not been doing much in these markets where the turnover is so small. On the New York Stock Exchange only 18% of the stocks listed were traded in 1951, and activity declined to a rate of 14% per annum in the first quarter of 1952.

A "sophisticated" market, in which there is little "public" participation, is unlikely to commit more than localized speculative excesses; and an investment public that always is looking for an accident to happen tomorrow or next day, or next week, is unlikely to establish equity appraisals as vulnerable as those that prevailed in 1919, 1929, 1937, or even in 1946.

MORE SOPHISTICATED THINKING

A profession that has made as much progress as ours in so short a time might profitably do some more sophisticated thinking about this matter of stock market forecasting. It has to begin by recognizing some axioms which are not far from platitudes.

CONCERNED WITH VALUES

Investors should be concerned with values. Values do not change so fast as prices. Price is nothing but the time incidence of supply and demand for shares. It happens. There is nothing scientific about it. Price, moreover, usually is established by transactions in an infinitesimal fraction of 1% of the shares outstanding. It is not uncommon for a change in ownership of 2% or less of all the stocks listed on the New York Stock Exchange to cause a 10% or a 15% or more change in the Dow Jones industrial share average. In thin issues, trading in $10,000 to $50,000 worth of stock can cause a change of $5 or $10 million in the market appraisal of a company. We might begin, therefore, by saying that even intermediate price changes are not so important as they look. I like to say that for an investor the worship of price is the beginning of sorrows.

The next thing we should remember is that practically none of our clients would buy at the bottom or would sell at the top, even if we advised it. Most of the buying and most of the selling is done somewhere in between. This hunting for tops and hunting for bottoms is more idealistic than practical. We think too much about it, and we encourage too much thinking about it.

THEY DO BEST WHO TRADE LEAST

In watching the performance of portfolios, you and I frequently observe the investors who do best are those who trade least. If the investor buys good stocks, under the direction of competent analysts, he does not need to pay the stockbroker such frequent commissions or the Government such impoverishing capital gains taxes.

PROPER SPHERE OF ANALYST

What, then, is the proper sphere of a stock market analyst, or of an investment analyst, in judging the trends in a sophisticated market?

1. He should recognize the great over-all urges motivating investor behavior. These may be read in the market's selectivity. Big investors have been seeking tax shelter. Many do not want a large income. They look for long-term appreciation and prefer to obtain it in "growth" stocks that they do not have to sell. They like to acquire shares of tax-sheltered companies—oils, mines, high EPT-exemption issues. Sophisticated people are "sold" on this word "growth." They expect to profit from it through larger population and unlimited technological progress.

2. Because there is little "public" interest in stocks outside of that indirect mutual fund, trustee, institutional, and pension fund interest which is implemented for the most part by experienced and sophisticated professionals, there is a great preference for quality. This tends to expand the already wide gulf between quality shares and speculative ones. It keeps the "temperature of speculation" just above freezing—except in Canada where they have been having torrid zone trading weather prematurely early this spring. Incidentally, if you want to learn from contrast, compare the speculation in Canadian land-spread oils with the type of trading in New York in now popular rail shares.

3. Some of the froth of inflation is being blown off by the end of abnormal scarcities and the beginning of normal abundance, by deflation of the extravagant ideas of a national defense program, by realization that we are not going to repeat the economy of World War II all over again, by a Federal budget almost balanced on a cash basis by high taxes, and by the somewhat painful return of the world commodity markets to more normal conditions.

This "inflation is a reason to buy common stocks" argument never was sound, and the public—broadly speaking—never fell for it. The fact that prices during the period between Korea and the gradual easing of international tensions never were even normally high in relation to earnings and dividends proves that.

4. The most impressive thing about this sophisticated stock market of ours is found in the differentials in price-earnings ratios and yields. The investment community constantly has refused to put a normally high appraisal on any earnings thought to be nonrecurrent. And now, with taxes assumed to be at a peak, see how the market puts a much higher-than-average appraisal on shares of corporations in the high excess profits tax brackets, obviously because it regards this inhibitive earnings factor as nonrecurrent.

5. And now I am going to refer to the market in terms of that so recently and so thoroughly discredited rubber measuring stick called the Dow Jones industrials. I see three important "support areas" in the immediate future in which I expect stocks to be more on the defensive than on the offensive.

SUPPORT AREAS

The first "support area" would appear to be around 250 to 255, near last week's bottoms. My guess is that last week's lows will be violated sometime in May or June.

The next "support area," which stands a much better chance to hold, is 241 to 246. Third "support area," which I do not expect to be broken short of some challenging and totally unexpected bearish news, is 230 to 235. My feeling is that the low for 1952 may not be far from 240, either way.

Now you have heard all about the shortcomings of the Dow average, with which I agree. Please do not think I regard the Dow points I have used as applicable to the measurement of prices for individual issues. These Dow "support areas" should be much more helpful to the institutional buyer than to the trader or run-of-mine investor.

I think you will see a new high in the Dow Jones rails, well above 100, sometime this year. I suspect the industrials will not go above the 280 to 290 range in 1952, or at least not until late in the year.

IN A CHANGING ENVIRONMENT

We are in a changing environment: (1) Apparently (and here is where we must hedge) international tensions are easing, (2) unquestionably we are moving from shortages to abundance, (3) the very long-range trend in interest rates seems upward for the first time in many years, (4) this word "emergency" is becoming discredited, and we will hear less of it, (5) probably the time is at hand when we soon may begin to think more in terms of recurrent earnings and less in terms of nonrecurrent earnings, and (6) Federal taxes probably are at their peak.

SHOULD STICK TO OUR KNITTING

All this, it seems to me, suggests we should stick to our knitting and devote our efforts to the identification of values in individual issues rather than go overboard in expecting extreme and pathological stock market behavior. *(Applause)*

* * *

Chairman FitzGerald: The approaches of these gentlemen in this stock market forum may not have been scientific, but they are certainly profoundly interesting. I would say to younger analysts, if you can handle the question, "What do you think of the stock market?" as well as these three masters have handled it, you will do well as analysts. The meeting is adjourned.

Announcing a Change in Name

FROM

ELECTRIC BOAT COMPANY

TO

GENERAL DYNAMICS CORPORATION

ELECTRIC BOAT, Groton, Connecticut
Specializing since 1899 in the construction of submarines for the United States Navy.

CANADAIR LIMITED, Montreal, P. Q., Canada
Builders of commercial and military aircraft. Now producing F-86 "Sabre" jet fighters for Canada and Great Britain.

ELECTRO DYNAMIC, Bayonne, New Jersey
Producers since 1880 of electric motors and generators under the name Electro Dynamic for marine and industrial use.

Electric Boat Company's activities have expanded far beyond their original scope. Today the Company is or plans to be engaged in engineering and manufacturing activities wherein practically every phase of the science of dynamics is applied: *hydrodynamics, thermodynamics* and, to devise a word connoting power from nuclear energy, *nucleodynamics* in building submarines at the Electric Boat Division; *aerodynamics* in building aircraft at Canadair Limited; and *electrodynamics* in manufacturing electric motors and generators at the Electro Dynamic Division. In recognition of this fact the Company has changed its name to General Dynamics Corporation.

GENERAL DYNAMICS CORPORATION
445 PARK AVENUE, NEW YORK, N. Y.

FROM THE ANNUAL REPORT FOR 1951

Results of the Year in Brief

	1951	1950
Unfilled Orders	$267,674,000	$91,260,000
Net Sales	82,638,055	41,754,339
Profit Before Taxes	7,722,203	2,506,941
Net Earnings	3,872,203	1,395,941
Net Earnings per Common Share	4.53	1.52
Dividends Paid in Cash*	1,031,977	1,207,065
Working Capital	19,426,192	15,007,699
Plant and Equipment (Less Depreciation)	6,760,969	7,031,393
Net Worth	23,606,169	19,840,191
Number of Employees	13,000	7,700

**In addition, a 5% common stock dividend was paid in 1951.*

Electronics and Television

TUESDAY AFTERNOON, MAY 6, 1952

WALTER PODOLAK, Stern, Frank, Meyer & Fox, Los Angeles, presiding.

Richard W. Lambourne (General Convention Chairman): Ladies and gentlemen, we would like to start this meeting on time. This is the first time that there has been an electronics and television forum conference at a National Convention of the Federation. We, in San Francisco, and in Los Angeles, are very proud of the fact that this is on our program. The time limit on this forum is supposed to run until a quarter to six. I am going to ask Walter Podolak of Los Angeles, the chairman, to try to get things done by a quarter of six, but there should be plenty of time for questions and answers until six o'clock. Then all of you are invited to go down to the San Francisco Stock Exchange for the cocktail party and reception, and I certainly hope that we will see all of you there.

It is my pleasure to introduce the chairman, Mr. Walter Podolak. *(Applause)*

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Chairman Podolak: Gentlemen, as you know, our subject today is electronics and television. Probably no industry today has more to look forward to in the way of future growth than the science of electronics, and, yet, it is extremely difficult for the investor and the analyst to participate intelligently in the future growth. It is probably one of the most difficult things we have today from an investment standpoint. When we think of electronics, we are prone to think of television. However, television is just one phase of electronics, and, though it is a tremendously important one, the other aspects of this industry also challenge the imagination. Since 1947 some amazing results have been recorded to date from the standpoint of gross dollar sales. This covers television set sales, television broadcast revenues, and other phases of electronics which include guided missiles and other military equipment for jet airplanes and military procurement items. Up to the last year television has been the largest factor. However, this growth to date, though startling, apparently has only just begun. Our forum will cover television and other interesting aspects of electronics.

We have with us today several outstanding individuals in the general field of electronics and television, and they will try to make the future a little clearer for us. I am sure you should find real value in what they have to say today.

I am happy to introduce a man who directs the research of a company which, unfortunately, has no public stock outstanding. He heads one of the largest research staffs in the United States. I say that advisedly, because you have to differentiate, but I mean in the field of guided missiles and work that is being done in certain phases of electronics, I understand his company has in the neighborhood of 3,000 or 3,500 scientists and electronic engineers working at the present time. He is a native of Salt Lake City and a graduate of the California Institute of Technology, majoring in physics, and he gained prominence in research in the field of electronics with G. E., with which company he was associated for about ten years. He is an author of several books, has written extensively on technical items in electronics, and is a recipient of many awards in scientific and engineering fields. He has been a director of several phases of electronics and guided missiles for the Hughes Aircraft Company. It is my pleasure at this time to present to you Dr. Simon Ramo, vice-president of Hughes Aircraft Company, in charge of electronics and research operations. *(Applause)*

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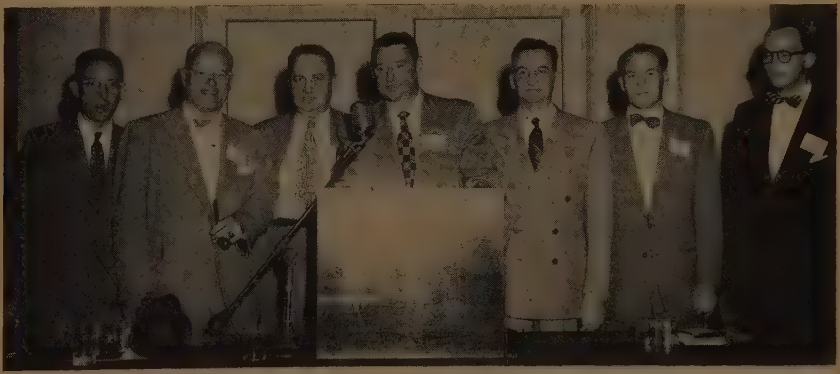
Simon Ramo: Ladies and gentlemen, I couldn't help thinking as I listened to that introduction — it was so enjoyable for me — that it was a shame to interrupt it. This is the first time that I have had the privilege of being present at this kind of convention. It was not possible for me to be here before this forum, but I have had the



Speakers and chairman at the electronics and television forum *(left to right):* Harrison Johnston, H. L. Hoffman, Walter K. Gutman, Walter Podolak, chairman, Dr. Simon Ramo, Thomas J. Gibbons, and Boyd E. McKnight

George Shimmon

benefit of looking at the program and I noticed that you have had to sit here and endure bank presidents, presidents of oil companies, presidents of stock exchanges, and various chairmen of boards. I imagine you are ready to sit down and have a discussion with a fellow scientist, one of your own kind. So let us analyze together, since I am among friends.

I will take some liberties in the use of the time that has been made available. I wrote out a few notes and submitted them as a talk. I understand the talk will be written up, so that you will be able to pick out those particular points that would be most helpful to you in your work. I discovered, when I dictated those notes, that there were many other points that seemed to be of tremendous importance. Since it is my field, I didn't see how in the world I could fit them into 25 minutes, and so I will take a few of the others with the same general trend.

SCIENTIFIC TALENT IN MILITARY FIELD

We cannot talk about military electronics, really, without going into the nature of the kinds of things that are being done, without noticing that over the past few years a very large fraction of a scientific talent of this Nation has been moving over into the military field.

Now, just what are all these scientists doing that we can talk about that isn't covered by security? Well, of course, we know that many scientists are working on bombs, on the article of destruction which has to be planted at the target. The electronics scientists, and those closely associated with them, are working in a field of science and engineering and business that might be called "precision electronics," to distinguish it from the more conventional and better-known radio, television, and communication sides of the electronic art. Possibly it might be described as the "synthetic intelligence" industry. By this last-mentioned name, synthetic intelligence, it becomes possible to begin to understand why this side of electronics, the precision side, is important not only in the military but also in the eventual nonmilitary applications. The replacing of the human brain in business and in industry, as well as in warfare, might well become, a decade or two from today, the largest industry in the Nation. If it does not become the largest industry, it would appear to be for one of two reasons: Either the human brain is not so important a device as all of us here assembled have assumed it to be, or else the art has not yet arrived at a point where we are able to do an effective, reliable, and economical job of replacing the human brain by devices.

Let us take this second possibility, the only one worth considering. That is, we shall assume that the brain is a desirable product to produce synthetically. If replacing man's muscles is what the industrial revolution basically has accomplished, and the industrial revolution in turn is the biggest single general factor that has caused such conferences as this one to be meaningful, then surely the replacing of the human brain must mean a second industrial revolution, this time having much greater consequences on our economy and our way of life. The more important question now is: What is the state of the scientific and engineering art in the synthetic intelligence field?

It is to be expected that the military would have the greatest immediate need for synthetic intelligence devices, and this is exemplified by the importance of air warfare; hence, perhaps, the suggestion made when I was invited to speak, that the topic be "airborne electronics." With the urgent need for maintaining superiority in the air — to defend ourselves against the possibility of enemy bombardment, to be able to retaliate against an enemy, or to lend tactical support to surface combat — in any of these instances the problem of control of the thing that flies becomes rapidly more difficult, if not impossible, for a human being, as the speeds increase, as the traffic increases, and as the problem of co-ordination with other airplanes and with ground observation and planning centers increases. Hence the tendency for all of these devices to be made automatic. But this is another way of saying that the pilot's brain is replaced by synthetic intelligence devices.

THE GUIDED MISSILE

A striking example of this is in the guided missile, which is something that flies and has intelligence built into it. It knows what it is that it wants to do. Like a brain, it makes use of observations as it goes, and puts those observations together with built-in impressions, prejudices, and understandings. It ponders, deliberates, figures out the best course of action, and implements that action. We are developing synthetic brains which will do things that the human brain can do and some things it cannot do. The "brains" that we are developing are very narrow devices, being specialists in particular lines of thought and being very stupid, in general, compared with the total intelligence of a human brain, not to mention the fact that these devices can become confused and unstable.

In addition, they can be designed to do particular things that a human brain for its intelligence is simply not fast enough to do. They can be designed to work with eyes and ears.

RADAR

Radar is, for example, used so these brains will take in data. They can be given memories. They can be given stored intelligence to "remember" *the kinds of things that a human being* finds it very, very difficult to remember. Although these brains are very limited in versatility and are basically endowed with a quality of intelligence that in number of equivalent brain cells is something comparable to a very low form of animal life, say, perhaps a worm, nevertheless, they are able to guide an airplane, to observe the enemy, to figure out where he is going, to be even where a human could not be, even to know that a target is present, make a decision of what to do to effect the necessary kill. The military needs these devices badly, because warfare has become so complicated that to make possible the resisting of enemy attacks and to carry attacks of retaliatory nature on the enemy with success have gone beyond the ability of the human brain to control.

NEED FOR SYNTHETIC INTELLIGENCE

Some months ago, when I was trying to explain to a group of military men why it was necessary that the military take the leadership in sponsoring the development of "synthetic intelligence," they asked why they are not getting Government support at that time. I said something very similar to what I have been saying about the military needs, but I happened to say it in a rather clumsy fashion. It came out like this: There is no organization in the world that has a greater need for synthetic intelligence than the American military. The need is there, in the military. *(Laughter)*

The need is there, and it is so important, so obvious, although a full explanation requires going into a complete discussion of the military situation, that that in itself would spur the development and would bring engineers and physicists and mathematicians to work on this subject.

NOT TALKING ABOUT PUSHBUTTON WARFARE

I should like to point out that I am not talking about pushbutton warfare, or at least some people's interpretation of pushbutton warfare. This, to me at any rate, indicates that someone pushes a button and things happen automatically. The pushbutton is not a very important device, and the fact that things happen automatically because someone has pushed the button is not the important point. New military developments of consequence depend on synthetic intelligence devices that have been built into the weapons, so that, when they are sent into combat, they will have the intelligence, the ability to observe and think and reach decisions, that will enable these weapons to carry on the warfare with less direct use of the human brain in the combat area. The need for the brain has been the reason, rather than the use of the human muscles, for the human being to be involved directly in the front line in the past.

ENTIRE FIELD UNDER DEVELOPMENT

This entire field is now under development. To be able to carry through the development of these devices into thousands of applications in business and industry today does not require a single new discovery in physics. The engineer has at his disposal today enough pure science to be able to apply it to revolutionize essentially every large operation where large numbers of white-collar workers are employed. However, these devices tend to be costly, they are complicated, and they will give trouble in maintenance. It will take many years before really good systems are worked out, and new discoveries in physics will furnish ways and means of replacing costly elements by smaller and more rugged and less expensive elements. As the whole art develops and stabilizes, it will be accelerated by discoveries in physics which will be incorporated.

The newness and complexity of these devices put them completely out of the class of the ordinary television set. Even if equal mass production were involved, the average radio and television manufacturer has few engineers and scientists. Largely, he assembles easy-to-assemble elements. His problems are more in distribution and sales. This is one reason why it has not been easy and will not be easy for the large radio and television industry (that is, large in terms of dollar volume) to fill up their floor areas with precision electronics. A good example of the difference here can be shown by quoting a few statistics about the company that employs me. We have one of the largest research and development laboratories in the country with a majority concentration in precision electronics, the synthetic intelligence field. Some 3,500 people work in research and development, including about 1,000 professional-degree scientists and engineers, a large fraction of whom have years of graduate study. The production facilities employ unusual precision machines, involving exceedingly high mechanical and process tolerances. The cost of the facilities per man is high, as is also the cost of a typical product, around $10 per pound, or 10 or more times as expensive as the ordinary radio and television equipment. Of course, these equipments are not being mass-produced in the same way that radio television sets for the home are mass-produced. They are likely to be produced in the thousands rather than in the millions. But even on the same mass production base, they would be several times more expensive per pound because of their complexity and precision.

REVEALS SOME INTERESTING FIGURES

This high complexity per pound reveals some interesting figures affecting the choice of factory location and the kind of organization capable of carrying on this kind of work successfully. At $100 per pound, a $100-million-a year volume, would mean only 1 million pounds handled. A two-ton truck carrying 4,000 pounds could carry this in about 250 trips. That is, in one year's time, 250 working days, the truck would have to make just about one trip a day to carry the products away. The truck might arrive in the morning about 8 o'clock and deposit a load of raw materials and along about 4 or 5 the truck might leave with a load of finished products. Assuming a little waste, we might allow two trips, a second one at 11:30, taking care of that waste by bringing in another load of raw materials.

So, here is this big $100-million-a-year rate factory employing, say, 10,000 to 20,000 people; a great big parking area; tremendous activity inside, all of these precision, complex devices going through their fabrication and assembly and testing; trucks going in all day long bringing in cafeteria supplies, office supplies, factory and laboratory equipment that is replaced or that goes in or out for maintenance, equipment used in maintaining the plant, repairing the buildings, and checking the instruments — all day long trucks go in and out — but only one small truck on one or two trips a day to take care of all the materials and all the output of this $100-million-a-year plant.

REPLACING HUMAN BRAIN

This is not surprising when you think of it again as the business of replacing what normally would be done by the human brain. If you could merely acquire a human brain as a slave, use it efficiently, maintain it, in the physical sense of keeping the organism in good health, not having to worry about clothing it or entertaining it or moving it around, but just leaving it in one room for all of its life, then, for the weight of a human head, you would be willing to pay many thousands of dollars, in fact, many thousands of dollars per pound. For devices that are relatively unintelligent compared with the human brain, and that are relatively costly at this stage of the art compared with the cost of a human brain, but that are specialists in their thinking ability, we are already willing to pay $100 per pound.

All of this suggests that the first important commercial application will come in those situations in which the human brain is not being employed to the fullest. Routine jobs where the human brain is used, in which paper is shuffled from one box to another and relatively little thinking is accomplished in the handling process, nevertheless require the hiring of people. Yet the handling of these brains in a business or industrial organization involves labor unions, Government control, rest rooms, pay checks with deductions, and a certain kind of unreliability associated with human behavior.

We have done some exploring and have talked to people who have various businesses. We are convinced that American business and industry have become so complex, and the trend of Government relationship with business and industry, and of labor relations with business and industry, that even the slightest, simplest operation of business requires so many more pieces of paper, more people to handle them, more things put on slips, more deductions from the pay checks, more arrangements, according to rules, with Government and with labor unions, that business itself, industry, and transportation are all looking for synthetic intelligence devices to replace people in those jobs where people are not particularly using their heads. That is another factor.

Thus business and industry, the whole trend of our economy right now, are asking for synthetic intelligence devices. I do not think we can go so far as to say that the housewife, as yet, is asking for household help in a synthetic intelligence field. I think she is still asking for something to take over the broom and the dishes. *(Laughter)*

BUSINESS, INDUSTRY, AND TRANSPORTATION

Now, of course, we see every day the beginning of synthetic intelligence applied to business, industry, and transportation — more and better business machines, with electronics added in a minor way only to increase speed or versatility slightly. We hear of big digital computers that are called giant robot brains, that solve equations in a few minutes that would ordinarily take 10 humans with ordinary calculating machines 100 years or so. These devices are to the eventual synthetic intelligence development what the simple machines like the wheel and the lever were to the industrial revolution.

ELECTRONICS IN THE AIR

I can perhaps illustrate well the eventual possibilities of synthetic intelligence, as compared with relatively minor aids to the human brain, by returning again to my original title, "Electronics in the Air." Every year the pilot acquires more electronic aids: better communication, better autopilots, better radar to locate himself relative to his surroundings, and blind landing equipment. In general, however, these devices merely aid in the making of the decisions by the pilot. Another step takes the decision out of the pilot's brain and puts it into the synthetic brain.

Suppose that a pilot is bringing a commercial airliner direct from some major city in Europe to a major city in the United States. There is a point, off his course to some extent, that he sometimes uses as a stopping-off place if he either is experiencing or is afraid that he might experience some trouble. As he flies, he studies the weather, he notes the wind condition, he notes his gasoline supply and the general condition of the airplane. He also receives reports on the conditions of landing at his desired point of destination and at the interim point he might want to use. He is conscious all the time of the fact that from the commerical standpoint it is important to bring the plane to the major city in the United States for which voyage the passengers have paid their money.

If a bad wind situation develops, if he loses gasoline, if he becomes concerned about the condition of the airplane's engines or about the possibility of fog which may make the landing doubtful at the point of destination, then he begins to consider the possibilities of stopping at the interim point. If he should decide to stop, then he should alter his course away from the direct route to the one that is substantially off to one side, but presumably a lot safer. In his mind he must weigh all these factors; they are many, and, as the minutes pass, the various factors have different weight. When his concern about safety, for example, reaches a high enough point (as a result of the integration of several factors if no one of them is sufficiently conspicuous), then the "commercial" desire to bring the passengers to the point where they wish to go is dropped entirely. The pilot is well aware that, annoyed as the passengers will be not to go directly to their destination as planned, they will be even more annoyed to land in the ocean.

DEVELOPS JUDGMENT OVER PERIOD OF YEARS

Over a period of years, a particular pilot develops judgment, intelligence, knowledge, ability to think, and ability to incorporate policies and rules of the air line into a decision. But what are all of these policies and rules and factors and conditions and judgments? They are simply the putting of two and two together many many times over. It is conceivable, therefore, that we could reduce all these factors to a series of numbers, with probabilities which come from very detailed and precise quantitative analyses, and that these numbers could be brought into the airplane's instrument board. Here changes in the weighting factors would be applied automatically to the numbers, as conditions change during flight and also because the airplane is changing its position in time. The synthetic intelligence device would produce a decision, and automatically implement that into guiding the airplane either to the final destination or returning it to the original take-off point, or to the interim point. If these decisions can be made by the human brain, and are made as a result of knowledge and deductive logic, then theoretically at least they ought to be reducible to a set of numbers and probability functions so that a superior decision can be obtained by a synthetic brain.

Now it is natural to say that to design such a synthetic intelligence device perhaps means to understand better not only what a human brain does in making a decision about a very complex problem, but also the data that are to be pondered by the synthetic brain. Refutation of the idea that synthetic intelligence can be devised to beat the human brain is merely flattering the human brain. It has already been decided that for many difficult military operations it is better to put the available data and the available judgments into synthetic intelligence devices than to put them into the human brain which becomes so confused as to be capable of wrong action about as often as correct action.

Since I am probably the most ignorant person at this conference about what a financial analyst does and what he thinks, I am therefore more than willing to take a certain risk in closing, and that is to indicate that in the field of financial analysis it is also conceivable that synthetic intelligence, well beyond any of the routine business machines or calculating and sifting apparatus that are now available, will some day be used. Naturally, in the present company, I must be careful to indicate that these synthetic intelligence devices will merely supplement the analyst in his work and not replace him. *(Applause)*

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Chairman Podolak: Thank you, Dr. Ramo. I think that you have given us lots of food for thought. I must say that I read parts of Dr. Ramo's speech just before coming to this meeting, and he started all kinds of things running around in my brain. I hope that sometime in the future we will be able to put this into practical benefits and application. As analysts, I am sure we will.

I have a lot of notes here, Mr. Hoffman, but I don't think I need to use them to introduce you. I think our next speaker is well known to all of us here on the Coast and, of course, throughout the country, too, since his products have certainly reached most television centers in the country. He has held various positions before becoming engaged in television. I think he was connected with Firestone Tire and Rubber Company for a good number of years in the '30's.

In early 1941 he took over a small company in Los Angeles that had about 7,500 square feet and three employees, a small radio company. Since that time the organization has grown tremendously from modest beginnings. So far as their gross sales are concerned, this years — it is my guess though I don't want to be quoted on this — $50 million in sales might not be far off. Certainly it is a mark of great progress since the beginning of this company in 1941. The company that he is associated with, which he started, is also engaged in research and has done a lot in the development of military electronics, something that probably for security reasons we do not know too much about. In any event, it is a great pleasure to introduce Mr. H. L. Hoffman, president of the Hoffman Radio Corporation. *(Applause)*

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Mr. H. Leslie Hoffman: Thank you. Mr. Chairman, ladies and gentlemen, I am honored and privileged to participate in the first West Coast meeting of the National Federation of Financial Analysts Societies and have the opportunity of discussing, if not the most interesting subject of the day — *politics* — certainly the second most interesting — *television.* As a Californian, I would like to welcome you to our dynamic state and welcome you particularly on behalf of the television and electronic industry here, one of the state's fastest growing activities.

OUTLOOK FOR TELEVISION

The outlook for television today is bright indeed. It looks better today than it did during 1950. Federal Communications Commission has released the freeze on new stations, and, with over 1,000 new communities getting television during the next three years, it would certainly appear that optimism is in order.

INDUSTRY IN THE WEST

Certainly no state that has experienced a 50% growth in population in the last decade and whose people have made such effective adjustments to a hectic postwar economy could escape your expert eye, and I am sure you can tell us something about our agriculture; our aircraft manufacturing; our motion picture production; our steel, aluminum, and magnesium mills; as well as our great oil industry and many others. However, I thought I might add something to your knowledge of the television and electronics industry in the West before I give you my outlook for television. I may have a few modest words for the most talked-about company in electronics out this way — Hoffman Radio Corporation.

Today Hollywood is making more films for television than for theaters. More Hollywood workers, actors, included, are currently toiling in television than in the major studios. Producers are now saying a live show can be filmed with quality as cheaply as it can be sent out on the air direct, and this with only 108 stations on the air. Television may be like the prosperous flea who bought his own dog.

140,000 EMPLOYED IN AIR FRAME INDUSTRIES

There are approximately 140,000 people now employed in our air frame industries of southern California, and, according to a recent survey made by the Inspector of Naval Material in Los Angeles, there are approximately 50,000 people employed by electronic prime contractor and electronic component manufacturers, with over 6,700,000 square feet being utilized in southern California for electronic work. This figure does not include the fine facilities and personnel employed in northern California. It does not include many additional subcontractors and suppliers, and, if these were added, the end result would be that there are approximately two thirds as many people employed today in television and electronics in California as there are in the aircraft industry.

LABOR DEPARTMENT SURVEY

A labor department survey recently published states there are more people employed in military and industrial electronics in the Los Angeles area than in the Chicago area. Before the war we people here on the Coast made 1% of all the radios in the country and yet consumed 18% of them. We are now making 6% of all the television sets and consuming 13%.

The growth of electronics in the West has been at a faster rate than in any other area in the country and there are some very excellent reasons. To name a few:

1. We have fine engineering departments in our universities here on the Coast. Formerly electronic engineers who graduated from Cal-Tech, Stanford, California, UCLA, USC, and other topnotch schools were forced to move East to get opportunities. This condition no longer applies. There are plenty of opportunities here where they want to live.
2. There have been many service laboratories installed here on the Coast, including Inyokern on ordnance, Point Mugu on guided missle, Point Loma on sonar, Moffitt Field on systems testing and atomic energy activities in New Mexico, Oregon, and Nevada.
3. A total of 60% of the aircraft manufacturing is done here on the West Coast, and much of the design and field testing is done here.
4. A great deal of the ship overhaul program is done on the West Coast.
5. Probably as significant as any other reason is the fresh approach of our personnel to engineering, research, development, and production problems.
6. The Industry Mobilization Plan of setting up second manufacturing sources in geographically different areas for the production of important electronic gear is giving many West Coast prime contractors as well as component manufacturers new opportunities.

Some ten years ago when I had the pleasure of organizing the West Coast Electronics Manufacturing Association, the West's contribution was exceedingly small and we were producing at the rate in 1942 of approximately $25 million per year. This was increased to $250 million per year before the end of World War II. It is my opinion that, if we could get all of the facts together, we would find that the over-all electronics and television industry is producing goods today on the basis of one-half billion dollars per year.

5 TIMES WORLD WAR II RATE

Our own company is producing military electronics at approximately five times the rate of World War II and plans on doubling this before the end of 1953. Fortunately, we maintained a staff of research and development engineers during the period from 1945 to 1950 and were able to contribute to the development and production engineering phase of much of the equipment that is being produced today. Consequently, when it was necessary to expand military electronics production, we had the basic core of personnel and facilities available and indoctrinated in the complexities of the military production.

GREAT VARIETY OF ELECTRONIC PRODUCTION

We are handling a great variety of electronic engineering and production. We have over fifty different jobs in the process at the present time and are doing business with BuShips, BuOrd and BuAer — the Signal Corps and the Air Force. We are working on several types of radar, sonar, small sea rescue transceivers, large field transmitters, communication transmitters and receivers for all services, frequency shift receivers, and many highly classified research programs.

We have an engineering staff of approximately 300 people on military electronics. At the same time we are working on military, our engineering group is constantly studying the new techniques and new ideas for commercial application.

50% OF OUR BILLING

It is estimated that our military electronics business will represent approximately 50% of our billing in 1952 and that our over-all billing will be approximately twice that of 1951. The present schedules that we have run through 1954 on production, but the research and development schedules are unlimited, so it appears that, although production may shrink, depending on our over-all national budget, there is not much question but that the research and development in the electronics laboratories must be continued if we are to maintain that security which superior weapons generate.

SENSATIONAL GROWTH OF THE INDUSTRY

The sensational growth of the television industry is a story you all know. Much has been written about it. You have felt it in your homes and in your business. I need not remind you that the television manufacturing industry has grown from a $50 million billing in 1947 to a $1½ billion billing in 1950 and slightly less than this in 1951. All told, the manufacturing phase of the electronics industry on radios and television has built, at the factory level, some $5½ billion worth of goods the last five years. Television itself became a billion dollar industry in a period of three years, compared with the automobile industry which took ten years.

I need not remind you that television has influenced American life and habits more than any new product on the American scene since the advent of the automobile. Television brought the family back into the homes after the automobile had taken it out.

I need not point out that this new miracle — the magic mirror of television — is the most effective means of mass communication the world has ever known. I need not tell you that some of the major capital gains your customers have made in the last few years were made in television stocks.

I would suggest that, in looking at television and all of its complex and interesting phases, one should not take a day-to-day view or be swayed by inspired press releases. The television and electronics industry's performance to date justifies your taking a long-range view. It is a new business; however, you will find some of the country's strongest companies among the leaders in television with both sound financial and management structures.

HAD ITS AWKWARD MOMENTS

Television has had its awkward moments and we will have them again. We had them last year, when, influenced by the Government's talk of shortages, we forgot that this is a seasonal business. However, there are very few businesses in the United States that do not have a seasonal fluctuation in a normal market. Normally the industry will produce and sell 40% of its goods the first six months and 60% the second six months. Last year we produced 60% of our goods the first six months instead of 40%; consequently, we got into trouble.

INVENTORIES CONSISTENT WITH SALES

This year, however, inventories of most well-accepted brands are at levels consistent with current sales. Our own sales are running at a higher level in 1952 than they did in 1951. We are fortunate in having a good segment of our primary market in Texas and Oklahoma, which are scheduled to be joined by cable and miscrowave to national programming July 1, 1952, so that they will be able to see the GOP and Democratic Conventions, as well as other fine programming.

Television today is essentially a free-enterprise, highly competitive industry on the manufacturing and selling front. The effectiveness of this industry should be measured in terms of benefits provided its customers, profits and wages returned to its stockholders and employees, and a high level of general public service.

On any of these counts and by any other standard of measurement, the accomplishment of television stands as a testimonial to the effectiveness of the American free-enterprise, competitive system, even though its freedom is restricted by bureaucratic regulations.

Let us look at England, where they have had television since 1935. The total number of sets now in use is less than in southern California, they have only two stations and a limited number of hours of programming, and that programming is dictated by the English Government.

SOME FATALITIES AT ALL LEVELS

Like the automobile industry and the radio industry before us, there will be some fatalities at all levels, and only the strong will survive. However, size in itself does not necessarily represent strength. Television manufacturing is a fast business requiring great flexibility and tight material controls, alert merchandising and resourceful sales promotion ability, low-cost manufacturing, and farsighted research and development. Strong executive leadership is required, and young, aggressive personnel with close lines of internal communication.

Each company must establish its definite spot in the market. Our own company has concentrated its activities here in the West and as a result one out of every seven television sets in the Pacific Coast States is a Hoffman.

We have built a quality product, designed it for the extra performance and extra distance reception required here, and styled it with a fresh styling for western homes. We have priced it at moderate prices and backed it with an aggressive and intelligent advertising and sales program. Our manufacturing costs are competitive with those of larger volume, and the manufacture of our products here in the West gives us a definite edge because of the high freight cost for our competitors manufacturing in the Middle West and East.

I cannot tell you what companies will survive and what our competitors are going to do, but I can tell you that we intend to stay in first position here in the West. Let us examine the present markets and analyze what we may expect in the way of expanded markets due to the recent decision by the Federal Communications Commission. Before doing so, however, I would like to comment that the future of our industry, like the future of the country, is tied to a change in the over-all philosophy of the executive branch of our Federal Government and the appointments that it makes to the various commissions that have direct control over various business activities. We suffer from the same malady as our entire economy. A few people in Washington believe they can mastermind every move for the poor ignorant public and industry. There is a distrust, suspicion, and outright antagonism against the people that have made this particular industry great, who have done such an outstanding job in building the finest mass communication system the world has ever known and giving free of charge the best level of entertainment, education, and public service.

The economics of the problem today are also more significant. In 1948 and 1949 most telecasting stations lost money. 1950 showed a definite improvement, but in 1951 the four networks and the 108 television stations did $239 million worth of business and showed $43,600,000 in profits before taxes. Such figures as these are certainly going to make the battle for channels an intense one.

FCC put the so-called freeze on the granting of additional construction permits for channels on September 28, 1948. This was to be on for six months, to study various technical matters. It was on 44 months, and on April 12, 1952, FCC notified everyone that the freeze was to be lifted, effective July 1, 1952.

NEW ALLOCATION OF FREQUENCIES

This new allocation of frequencies gives a total of 1,275 communities 2,051 channels, with 606 VHF channels and 1,445 UHF channels. Between April 12 and July 1, present applicants must amend their applications and any new applicants are to submit theirs.

The general procedure will be on a channel-by-channel basis—in other words, each applicant indicates the channel he wants. If no one else asks for that particular channel up to the day before the commission's action, the applicant is eligible for a grant without a hearing. If two or more apply for the same channel, a hearing is set. The order of priority in which applications and hearings will be handled is that they will give the highest priority to the biggest cities now getting the least service and to those cities in which UHF will provide the only new service. Major "nonservice" cities, such as Portland and Denver, obviously will be given top priority.

11 STATES HAVE NO SERVICE

Here in the West seven of our eleven western states have no television service whatsoever, and there is only one station in each of the important states of Washington, Arizona, and New Mexico, two in Utah, six in Texas, and eleven in California, which certainly indicates that the West is entitled to get top priority action on the various applications in this area.

A detailed analysis of this new allocation is included in a fact booklet which we will pass out at the end of our discussion, because I am sure you are interested in what may happen in your own community as well as the general picture in the United States. At the present, 26,565,000 homes, or 60% of the 44,167,000 homes in the United States, are in the 60-mile television signal area. But 40% of the population do not have a television signal. To break this down still further, 70% of the population east of the Mississippi have television service, whereas only 43% of our population west of the Mississippi have television service.

As of February 1, 1952, there were 16,129,000 television sets sold, or an over-all penetration of about 60%, with 13 million of them east of the Mississippi and 3 million west of the Mississippi. About one family in two have television sets east of the Mississippi and only one family in five have television sets west of the Mississippi.

It would appear that the development of increased sales and higher production will be gradual over the next two years. It is my opinion that industry sales in 1952 will be approximately 10% above those of 1951, or in the neighborhood of 5¾ million sets, with that figure going to 6½ or 7 million in 1953 and 8 to 9 million sets in 1954

In addition, 7 million sets, or 45% of the total, are 16-inch or smaller and represent an immediate replacement market with a replacement figure of 3 to 4 million per year. This would only mean 3½ million new sets sold in 1952, 4 million in 1953, and 6 million in 1954. With 102 million radio sets (one for each person above voting age in the United States), 36 million refrigerators, and 36 million automobiles, that looks like just a good start.

I should like to answer some quick questions that have been asked me regarding the recent decision of FCC:

1. Will my present set become obsolete because of the opening of the USF band for telecasting?

The answer is "no." The sets that are now on the market will not be made obsolete by this new ruling. Practically all sets have been adapted to receive programs telecast on the ultrahigh frequency as well as the present very high frequency. They can be adapted either through an external adapter or by changing the tuning strip in the tuner. The cost of such conversion with the turrent-type tuner, such as our company uses, is less than $10, and the external converter runs in the neighborhood of $25 to $40.

There will undoubtedly be a combination UHF-VHF set announced this coming fall. The cost of the complete dual-type sets will be higher, and, because the present designs are so flexible, it is my opinion that this market will be very limited until such time as we can bring the cost down to a more moderate difference between the combination VHF-UHF and present sets.

2. What size town can support a telecasting station?

It is the opinion of some of the people in the broadcasting end of the business that any community that can support a newspaper with $500,000 to $750,000 billing per year can support at least one television station. Constantly improved programming will be a by-product as more and more stations go on the air. It also should reduce the sponsors' cost per customer. I hope also that, through the competitive system, it will eliminate the five and six continuous commercials we have on some one-station towns.

There will be no problem in securing the necessary materials to put the new stations on the air. Requirements of transmitters, studio equipment, and antennas for 1952 can be met from manufacturers' current inventories. There are some 28 transmitters that have already been delivered to prospective broadcasters, and there are an additional 20 more in the manufacturers' stocks with 154 in process.

The lifting of the ban will not mean a great number of stations this year, and it is estimated that less than 20 new stations will get on the air in 1952, most of these in smaller communities. Unfortunately the larger markets will be aggressively sought after and will consequently go to hearings. It may be, however, that there will be some mergers before this log jam is encountered.

ONLY SEVEN EXAMINERS

FCC has stated that they have only seven examiners for these hearings, and each examiner normally processes three hearings per year. So, unless something is done to accelerate the movement of this heavy bureaucratic machinery, it will take three to four years to get permission to give the remaining 40% of the people in the United States full television services.

It is most difficult to make an educated guess as to how many new stations will go on in 1953, 1954, and other years. However, it is my opinion that we should get somewhere in the neighborhood of 100 to 150 stations in 1953, with double this amount in 1954.

There is no question but what more and more shows will be on film, particularly where the transmission costs are not justified by the market coverage. Hollywood has been the capital of both the motion picture and entertainment world, and, with the impact of these additional stations, there is no question but that it will become the capital of the television business. Another factor that is becoming increasingly apparent as evidenced by the rushing in of applications for channels by the newspaper people, the motion picture concerns, sound broadcasters, and others, is that television is a partner, not a competitior.

GLOOMY PREDICTIONS NOT PROVED TRUE

According to a survey recently completed by N. W. Ayer & Son, the gloomy predictions that television would cut heavily into newspapers, magazines, and radio and threaten the very existence of sports, movies, and other recreations have not proved true. Nearly all are enjoying good years — many hit an all-time peak in 1951 as the novelty of television wore off. Newspapers not only held their record circulation in 1951 but also gained twice as many dollars in total advertising revenue since 1947 as were spent on all television advertising in 1951. Circulation gains were the same in television as in nontelevision areas. Television families buy more magazines — magazine advertising revenue broke all records in 1951.

There are now 102 million radio sets in the United States, or one radio set for every American of voting age. Advertising revenue on radio climbed from $314 million in 1946 to $485 million in 1951. Radio production itself has been the greatest since the advent of television of any year with the exception of 1946. Good movies are bringing in good crowds, and, although some theaters have closed their doors, more than 3,000 new drive-in theaters have opened since the birth of television. Sports have largely held at postwar attendance gains. Major league baseball clubs that televise regularly had a gain of 234,169 admissions in 1951 over 1950, while those reducing or eliminating television showed a loss of 1,485,000 admissions. Professional football, racing, and boxing all showed gains — only minor league baseball showed serious loss, about 20%, which could not be due to television because only about 40 out of 300 clubs are in television areas.

The time is too short today to try to cover all of the potentialities of the future of television. It is somewhat like the old saying: "It is hard to lie fast enough to keep up with the truth." However, there are a few things that are rather apparent that we may look forward to.

The sale of television sets will closely follow the sale of radio sets, with the exception, of course, of automobile TV. We will have the second set in the home and possibly the third and fourth sets in many homes as the variety of programming expands and each person in the household wants to view his favorite. We will have portable television sets.

CONTINUE TO IMPROVE QUALITY

We intend to continue to improve our quality and reduce our cost wherever possible. Today we are selling a 21-inch table model television set for $350 to $375, compared with a 10-inch set in 1947 for $475, and the 1952 set is a better set electrically and gives four times more picture area. Compare that, if you will, with the price of a Ford car in 1947 and that of one today.

The industry has been quick to pass to the public the improvements and cost reductions coming from our laboratories. This has puzzled many people; however, I would like to call your attention to the fact that repossessions of television sets are the lowest of any articles in the appliance business.

Television sets are requiring much less service than the original sets did and are covering wider areas. With our own particular set, we are getting regular signals, both day and night, in areas as far away as 200 to 225 miles from the transmitters, which a year ago was thought completely impossible. This has been brought about through extensive engineering developments. As a matter of fact, one of the noise-rejection circuits that we developed for some of our military work is used in our set.

There is a physical limitation to the size of a direct viewing tube, and we may be close to that limitation. It may be that the industry will go in the direction of a new type of projection television when we reach the ultimate in direct viewing. However, a forecast of this nature is strictly speculation at this time.

There will be wide usage for television in industrial applications wherever controls are needed, and enough has been done in this direction to indicate a wide market. Television also offers much in the way of industrial intercoms by which you can see the person to whom you are talking. Television was the keystone of civil defense in England during World War II and can be used for the same purpose here.

Many uses for television are developing in the military, such as radar control planes flying over enemy locations and telecasting enemy positions. The Navy is working with television for various submarine usages. The transistor will play a big part in the future development of television as well as electronics, but I would like to caution you not to expect this too soon because I think it has been overpublicized to date. Its present usages are quite limited, and most of the transistors that are made will go into military applications in the early stages of development.

There is another technical development — magnetic amplifiers — which promises much for all electronic usage. We believe that we can expand the range of both the transmission of telecast programs and the reception of telecast programs. We have gone from 100 to 200 miles during the last three years and it is conceivable that we can go still further.

FOR SALES TRAINING

The use of television for sales training and sales meetings has already been tried and found to be exceedingly effective, and this is a place where modern communication methods should be used. The use of television in the medical profession is one that has also been well illustrated with the telecasting by national hookup of delicate brain surgery. As a matter of fact, the entire field of education is one that can be helped by the use of television. It is rather interesting that only 20% of our population above 25 have a high school education, 7% have gone to college, and 5% are graduates of colleges. Television certainly offers a great opportunity for these people to expand their knowledge in any field from language to physics, as well as covering any hobby in which there is widespread interest.

GREAT POTENTIAL OF EDUCATION

FCC has recognized the great potential of education by television by granting channels to educational institutions, and even though most people in the industry thought that the commercial stations should handle this public service rather than that the colleges and universities should be burdened with the financial expense of transmitting equipment, studio equipment, and all the expensive auxiliary cost, I am sure that the industry is sympathetic with the objective and will help wherever possible.

Television has already changed the social habits of the home. It has helped the furniture industry because people became more furniture-conscious when they stayed home more. It has united the family by means of common interests. In many homes it has changed the method of eating in the home and reduced the amount of eating out.

There is hardly any business in the country that has not been affected either directly or indirectly by the advent of television. Even the streetcar companies in Los Angeles complain that television makes people stay home more at night and consequently not come to town so often.

Television can very easily help elect the next President of the United States, and it can, on the other hand, defeat a potential President. Television can be an unparalleled blessing to the voter. The phonies, the stuffed shirts, the liars, and the crooks will have to look the cameras straight in the lens and talk fast. We will see the politicos as they are, warts and all. If, after such a test, the political hacks survive we have only ourselves to blame.

It is significant that our greatest single diplomatic victory was achieved at the Japanese Peace Conference meetings here in San Francisco. I am sure that Acheson and the other people who participated in this peace conference were quite cognizant that 25 million people were looking over their shoulders, and I am equally sure that this had a very definite effect on strengthening our position.

I would like to pay tribute to our telecasting group in Los Angeles and San Francisco for the outstanding job of public service that they did on the Japanese Peace Conference, the MacArthur return, and the recent atomic explosion in Nevada. This was a brilliant example of people in a highly competive industry uniting in order to render a better public service.

Yes, the outlook for television is exceedingly bright, not only in the manufacturing end but in the programming and telecasting end as well. It is a great challenge, as well as opportunity, to see that television in all of its phases is used to create a better-informed public and a better-educated public with a high level of fine entertainment coming into our homes daily. Certainly the second half of the twentieth century is truly the electronic age. *(Applause)*

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Chairman Podolak: Thank you very much, Mr. Hoffman.

I think it would be appropriate to take about two minutes for a recess. *(Short recess)*

Chairman Podolak: The next part of the program concerns a rather interesting subject, "Electronic Tape at Work." It will consist of three parts, very short, and all of the speakers are engineers by trade. Our next speaker was with the Goodyear Aircraft Corporation for a number of years and then transferred to the General Electric Company where he was an engineer. It is my pleasure at this time to introduce Mr. Harrison Johnston, who is the manager of the engineering division of Ampex Electric Corporation. *(Applause)*

* * *

Harrison Johnston: Mr. Chairman, ladies and gentlemen, yesterday in Redwood City, a few miles from here, a large guided missile flew through our engineering laboratory; and yet the accounting department next door did not know it was there. I don't mean to sound fantastic, yet this is one of the many things we can do with the fabulous new medium, tape. Actually, of course, our engineers were using electronic tape to relive, with all its original accuracy, the flight test of a missile actually flown some time before on the test range, and yet they had recreated in front of them all of the measurements made on the missile during its actual flight.

You are probably wondering what this new medium is. Very briefly it is a new means of doing something that man has always wanted to do and that is: record. Yet electronic tape does it better, easier, and cheaper than any other known medium. In addition, it has the advantage that we can reproduce the original program time after time with no deterioration in the record. We can, with ease, cut parts of the program out or insert new parts, but to industry one of the most important assets tape has is its ability to re-create the original electric signal. Past media have given us the ability to "look" at the record, but so many times we do not want to "look at the record;" we would much rather have the original electric signal which now can be re-created with great ease, if we record on tape.

USES OF TAPE

Primarily I am going to try to tell you some of the uses to which tape has been put in industry and what these uses mean to industry. If I appear to be very enthusiastic about this new medium you will understand that one of the things we, who are closely associated with this industry, have to guard against continually, is becoming oversold ourselves. Acutally, we see so many new uses coming to us every day that our vision of the future possibilities makes us very enthusiastic. Today I will try to give you factual information without the enthusiasm.

Application of tape in some industries has been very rapid as their need for new technical tools developed. For example, tape is beginning to be used by the petroleum industry for oil prospecting. About nine months ago, Ampex developed, in co-operation with one of the major oil companies in the Southwest, one of the first experimental tape recorders for seismic exploration work. The results have been more than expected. As you know, normally a crew goes into the field with a truck, a small drilling rig, some dynamite, and photographic recording equipment. A hole is dug, a dynamite charge set off, and the blast recorded at various distances from the hole. A skilled technician in the truck must set his knobs properly so that he will get only the kind of information he wants. If he makes a mistake the shot must be made again. Tape because of its ability to reproduce the original signal, allows us to leave the skilled technician at home, record the entire blast, and then sort out the important information back in the laboratory. This can be done because the original electric signal can be reproduced from the tape, played over and over and over, while different filter systems are tried until a perfect record is obtained from one shot. This means several things to the oil companies: (1) lower exploration costs, (2) ability to explore more area faster and (3) ability to find oil easier and with greater certainty.

RESEARCH INDUSTRY

Tape is very much in the research industry if you can classify it as a separate industry. Tape is used currently by research people wherever they are. Some of them are in Government laboratories; many are in industrial research and development laboratories. Specifically engineers and scientist doing research on automotive equipment, such as buses, trucks, passenger cars, and components of those vehicles, such as mufflers, engines, and transmissions are using tape recorders for recording tests that they make on these units. The tests are later analyzed electrically or compared with previous recordings to determine improvements. Engineers in large electrical companies are using tape recorders for vibration studies of jet engines and electrical machinery. In each case, the tape recorder is a research tool. It records technical data.

AIRCRAFT INDUSTRY

The aircraft industry has taken to tape very enthusiastically. One of the problems in developing a new aircraft, or guided missile, is to make all the measurements required to tell the design engineer how the various components reacted under actual flight conditions. In missiles, which may not be covered, it is necessary to transmit all these measurements to the ground by radio. Previously photographic recording of the measurements was done on the ground. This continued until someone discovered that there were still in existence test results from rockets flown several years and no one had looked at them. They just had so many data they could not study them. Today they use tape recorders so that automatic data analysis equipment can be used. The tape recorder, when played back, re-creates the original measurement signal which can be fed into a computer or other analytical tool and automatically analyzed, without being "touched by human hand." The test engineer can also determine from quickly scanning the tape whether the flight was routine or whether some trouble developed. If everything operated properly, the test results can be filed. If something malfunctioned, that portion of the record can be examined more closely or recorded photographically from the tape for detailed analysis. For this testing work, tape recorders are located on all the major missile test ranges including the long-range Air Force Missile Test Center at Cocoa, Fla., where tape recorders are installed on each of the "down-range" islands over which the missiles fly.

USED FOR CONTROL

In addition to testing, the tape recorder has proved that it can be used for control. Since tape actually is a memory device, you can readily see that it is possible to preschedule on tape all of the controls for a missile. We can predetermine its speed, height, angle, direction with respect to time, so that we can preschedule the flight pattern by recording coded information on tape. When the tape is inserted in the missile, it will control the flight path of the missile. The machine tool industry is interested in control and preprogramming. A tape recorder will soon be delivered by Ampex to a company in Cleveland, Ohio, to control a machine tool which makes propeller blades so that each blade will automatically be made by the machine to exactly the size and shape dictated by the tape. From this you can see how we can quickly progress to automatic machine tools and the automatic factory, perhaps.

POWER INDUSTRY

Tape will be useful to the power industry since it gives the power engineers a new tool for studying disturbances and locating weak parts of their system. The tape recorder can *continuously* record conditions rather than just waiting for something to happen. If nothing happens, the tape is erased and a new record is made continuously. If a disturbance does occur, the power engineer has a complete record of the period preceding the disturbance and all the various conditions during the disturbance so that he can determine what went wrong and how to correct it to assure his customer of better service in the future from his electric power lines.

Each day, as more and more of the Nation's technical minds become familiar with tape, they show us that it will solve more new problems. Each week a new industry joins our user group. During the past few years our efforts have been spent largely on urgent applications for the defense effort where we have proved how advantageous it can be to use tape. As these problems are solved and when we have the opportunity to get more and more into the problems of other industries and to apply our full "know-how" to the solution of these problems, we expect considerable new developments in the use of tape by industry. As a matter of fact we consider that to be a great potential for future expansion, even though we are also finding new applications for tape in recording music for entertainment, in spite of the fact that industry has, by far, the largest number of recorders.

ENTERTAINMENT INDUSTRY

No mention of tape at work will be complete without mentioning the tremendous job it is currently doing in the entertainment industry. Much of the sound you hear over the radio has previously been recorded on magnetic tape, and almost all of the records you play at home have been originally recorded on tape. The masters are stored on tape. We have even recorded, with our standard equipment, facsimile on tape. This is useful when facsimile is transmitted by radio and atmospheric conditions are favorable for only a limited period of time. At the wrong time of day facsimile can be received and recorded on tape without delay.

RECORDING MOTION PICTURES

The newest thing, of course, at least in the talking stage, is recording moving pictures or television programs on tape. Many people in the tape industry are working on this development, and the day will come when complete television programs can be recorded, stored, and reproduced from magnetic tape, very much the way radio programs are now recorded and reproduced. This would result in annual savings running into the millions of dollars resulting from the elimination of thousands of feet of photographic film and changes in techniques, facilities, and processing equipment. When this is possible, another new horizon will open for magnetic tape because these techniques that will allow us to record pictures also mean that we can do a multitude of new jobs for industry.

AMPEX

I would not be human if I did not insert, at this point, the observation that Ampex with its fast background in tape recording and from its position as an acknowledged leader in the industry, will quite probably have a better chance than any other agency of coming up with the solution to these problems when one is found. It is perhaps disappointing to you as financial people that I have not brought into my talk any numbers. You will understand this I am sure since Ampex is not yet publicly owned.

In summary, this is a new industry — an industry whose eyes are not yet fully open to where this path of tape will lead. We have a new way of doing it, a way of doing it better, faster, easier, and cheaper, and doing more and every day of doing something else, something new. For those who are pioneering in the reduction of these new ideas to actual practice and to physical form, we are certain that our remuneration will be great, but more important to us, at the present time, is the fact and the satisfaction that we are rendering a really vitally needed service to our country and to its people. *(Applause)*

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Chairman Podolak: Thank you Mr. Johnston.

Our next speaker is also an engineer. Also of interest is the fact that he helped develop electronic tape with Minnesota Mining & Manufacturing Company. He was transferred to Los Angeles to start a branch there. It is my pleasure to introduce to you Mr. Thomas J. Gibbons, who is sales manager of that division in Hollywood. *(Applause)*

* * *

Thomas J. Gibbons: Thank you. Mr. Chairman, members of the National Federation of Financial Analysts Societies, tape recording plays an integral part of our daily lives, and most of us are just becoming aware of it.

RADIO

The radio industry was the first to use magnetic tape and to recognize its numerous advantages over other recording mediums. Bing Crosby was the first great radio artist to "go on tape," and he greatly influenced the radio industry to accept this recording medium. He desired to record programs at his convenience. Because of a busy schedule of personal appearances and motion pictures and a desire to watch his Pittsburgh Pirates and to participate in various golf tournaments, he often found it difficult to sandwich in all engagements and still fulfill his weekly radio commitment. Tape had the answer to his problems. He could not only tape his shows in advance, but he also found that tape was superior in sound quality, could be edited easily, and was economical.

The feature that endears tape to producers and entertainers in radio is its ability to be edited. With tape, fluffs and all mistakes can be edited by splice or erasure with ease. When a faux pas occurs, the tape is reversed to the error, a redo is recorded, and in a few minutes you are on your way again. Many dollars have been saved, not to mention the prevention of embarrassment for all concerned. The final edited result which the public hears on the air is as close to being perfect as possible.

Today most leading programs heard on the radio are recorded on "Scotch" Brand Sound Recording Tape, manufactured by Minnesota Mining and Manufacturing Company.

MOTION PICTURES

In 1949 we coated a magnetic film for motion picture studios. During the original filming of a motion picture, two cameras are used, one for sound, the other for picture. Photographic film was first used exclusively in both cameras. Today, however, the sound camera employs magnetic rather than optical film.

MGM, Twentieth Century-Fox, Paramount Pictures, Warners, Universal-International Pictures, RKO, and Columbia are a few of the major studios using our magnetic film.

Since April 1, 1950, all production shooting at Paramount Pictures has been recorded on 17½-mm magnetic film. This was the first major motion picture studio to use magnetic recording exclusively, and, because of their pioneering in use of magnetic in motion pictures, they were awarded an "Oscar" by the Academy of Motion Picture Arts and Sciences in 1950.

RECORDS

Magnetic even wormed its way into the disk-recording field when Capitol Records decided to place all its master recordings on tape. Record pressings are made from these tape "masters." All major recording companies have since followed this practice and are using tape for original recordings. High fidelity and ability to play innumerable times without deterioration were paramount reasons for the switch.

TELEVISION

Poor sound quality on some of the first television pictures was responsible for extreme interest in magnetic recording for television. Major networks are beginning to record on magnetic tape or film because of the absolute clarity of the sound.

The Groucho Marx television and radio show is one of the major television shows recorded on "Scotch" Magnetic Recording Film. The interesting high light of this show is that, although only recorded once, it is released twice, once as a television show with sound and picture and then again as a radio show employing only the sound track.

JIMMY DURANTE

One of the most interesting uses of tape that I witnessed is evidenced in the writing of author Gene Fowler's book, *Schnozzola,* the story of Jimmy Durante. Fowler has introduced a new technique in biographical writing. Almost all of *Schnozzola* was captured on "Scotch" Brand Sound Recording Tape. The painstaking Fowler recorded 138 reels of tape to preserve in their own words anecdotes, episodes, and memories of Durante and his associates which form the basis of *Schnozzola.* With this technique, it is little wonder that *Schnozzola* makes the reader feel he has sat in on 100 midnight sessions with Durante and his pals and listened to them relive a legend of Broadway and its environs.

EDUCATION

Members of the teaching profession have always been intrigued by radio programs of great classroom value. However, the difficulty in using them lay in the fact that the desired programs were seldom broadcast at class time. To attempt to record such programs for later playing was expensive. It was the hope that some central recording service would be set up to serve the needs of all teachers.

The Minnesota Department of Education, under the auspices of the Audio-Visual Department, set up a recording tape library. Catalogs of their programs were published and distributed to audiovisual directors throughout the state. The catalogs include everything from stories for the small fry to enlightening discourses on mental health.

The University of Minnesota Tape Library has a reference list of over 50 different tapes in approximately 20 different categories. For example, if a teacher in Duluth, desires a tape lesson on the subject of the Mesabi Iron Range, she writes to the "Tapes For Teaching" headquarters at the University of Minnesota. The order blank she sends in bears the code number taken from the catalog list. Along with this, she send a roll of "Scotch" Brand Sound Recording Tape plus return postage to the library. The lesson she has requested is recorded on her roll of tape from the master copy on file in the library. It is then sent back to her without charge.

This in brief shows tape at work in the radio, motion picture, television, and educational fields. We at Minnesota Mining predict a brilliant future for this amazing and versatile product. *(Applause)*

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Chairman Podolak: Thank you, Mr. Gibbons.

We have one other gentleman from the Minnesota Mining & Manufacturing Company, Mr. Boyd E. McKnight, who has had equal experience in engineering and is connected with the magnetic recording division of Minnesota Mining in Los Angeles. Mr. Boyd McKnight. *(Applause)*

* * *

Boyd E. McKnight: Thank you. Mr. Chairman, ladies and gentlemen, Mr. Johnston has just given you a good picture of the activities of Ampex Electric, and Tom Gibbons has shown you what we have been doing. Ampex and Minnesota Mining have changed the face of the recording industry since practically every quality recording studio and network system depends on Ampex machines and "Scotch" Brand Recording Tape. The title of our combined talks is "Electronic Tape At Work." Perhaps I should tell you what electronic tape is and how it works.

Electronic tape is a ribbon of safety base acetate film coated with iron oxide dispersed in a resin carrier. The iron oxide is magnetic. This iron oxide will permanently store a sound or signal in the form of tiny magnetic pulses along the tape. When played back, the magnetic impulses are converted back to sound through the loudspeaker. The coating is only one half of one thousandth of an inch thick, and yet it captures sound better than any other medium. What effect will this little piece of tape have on business and profits in the future? Let me tell you of some of the things to come, and you will have your answer.

Perhaps you read the press release of Bing Crosby Enterprises announcing magnetic pictures. It is a fact. The accomplishment of this deed can revolutionize moving pictures, television, communication systems, and home movies through your television set. We foresee the magnetic recording of moving pictures, news events, sports events, radar, progress at the battlefront, and atomic radiation. Here is a medium capable of storing enough information for color television. Immediate playback without processing offers many advantages. This project offers infinite business possibilities.

INDUSTRY CONTINUES TO CHANGE

The recording industry continues to change. Recorded tapes are being sold over the counter like disks. The interest of some of the major recording companies indicates that this may be a booming business in the near future. My personal opinion is that the recorder manufacturers will produce a low-cost tape phonograph with the tape in a cartridge as an endless loop. Push the cartridge in, and it plays. At the end of the selection, it stops automatically. There will be no tape handling and no rewinding. Such a device already designed will be suitable for juke boxes or for continuous recording in an airport control tower. And this is the ideal home tape phonograph.

This phonograph is also an ideal solution to the talking book for the blind. At present the Library of Congress has a service for the blind. The talking book is a disk-recorded book played on phonographs furnished by the Library of Congress. Many records are damaged and broken each year, and machine maintenance is high. The tape phonograph with the tape in cartridges is the answer.

Education is changing. Tape recorders are becoming a necessity in the schools. Speech therapy, teaching retarded children and the hard of hearing, drama, business training, even science and mathematics are being taught by the use of tape recorders. Tom just mentioned the Minnesota Tape Library. Many states and schools have followed Minnesota's lead and are establishing such libraries. The college broadcasting network is primarily a tape network.

Industry is changing. Recording on magnetic tape and film is by no means confined to the entertainment and educational fields. More tape is being used every day to control electronic equipment by the use of magnetic pulses and special wave forms where no sound is involved. Magnetic recording is the memory and often the source of supply of data for the mechanical electronic brains which solve problems in hours that normally take men many months to solve. The problem of a plane flying through an atomic blast can be recorded and solved by these electronic brains. The result is a plane design that can withstand a terrific buffeting.

The search for better methods of manufacturing has led to magnetic tape. General Electric Company produced a turret lathe. It is only necessary for an operator to make one part. The operation is recorded on tape. When the part is finished, the machine becomes automatic. The tape directs the operation. This lathe then can become a master machine which will direct any number of similar machines. Another company is developing a tape control for a conveyer belt. The complete operation and direction of the conveyer belt will be automatic with the electronic tape as the brain.

Other automatic control devices are being designed. *Fortune* magazine had an article a couple of years ago about a completely automatic factory. With the use of magnetic tape this is now possible. Many industries are using magnetic tape to record motor characteristics, car and truck muffler characteristics, and test data of all kinds required to make products better for you and to make more profit for the investors.

The military needs for magnetic tape are increasing very rapidly. The Armed Forces Radio Services is already receiving taped programs of the "Way Back Home" series from 800 American broadcasters for rebroadcast to our Armed Forces. These programs present local culture from all parts of the country. Little-known facts of these areas go to our boys through 62 Armed Forces radio stations in foreign lands with approximately 90 million listeners.

The guided missile program has top priority. The test information from experimental missiles used in the design of the successful missiles is recorded on "Scotch" telemetering tape and analyzed by the electronic brains. Information is now being recorded on tape from many parts of complicated machines for laboratory analysis at a later date.

An airplane can now be guided to its destination, perhaps to take magnetic pictures, and the plane will then return, the whole mission being controlled by nothing more than a piece of magnetic recording tape. It appears that pushbutton warfare is entirely possible. Through these military developments are coming commercial developments which very definitely will bring about business projects unthought of today. Minnesota Mining & Manufacturing Company is looking to the future. *(Applause)*

* * *

Chairman Podolak: Thank you very much. I am sorry we are running so close to our other schedules. I am going to introduce very quickly Walter Gutman of Goodbody & Company, New York. I am sure you all know him. He will make the analyst summary. He needs no introduction. *(Applause)*

* * *

Walter K. Gutman: Mr. Chairman, guests, and fellow analysts, reading these speeches on the plane, when I came out here, I was thrilled about them. I think you probably were too, certainly, by some of the indications of a fabulous future for the electronics industry. There is no security analyst in the Societies who knows less about electronics than I do, and that is one of the reasons they asked me to be a speaker — to provide an unbiased viewpoint. I have had an unbiased thrill.

I don't feel it is the prime business of the security analyst to be an expert about an industry. It is his business to know where there is opportunity to make money. How does wealth grow? That is his problem. How can he realize it in time, and understand it. These talks have opened my eyes, and I believe probably opened many of yours. Some of your eyes were, of course, already open to what is an enormous field of opportunity. I don't know the details of this field. I cannot point exactly to where we are going to make money in the next ten years. I have some ideas. There are analysts who specialize in the industry. They can do the pinpointing. The important thing for us to do here is to realize very deeply that this is a new field of opportunity.

It is like an oil field. An oil field opens up, somebody discovers it and drills some wells; a few people make a great deal of money because they somehow realize there is something there; other people wait until the field gets all built up and then years later they buy investment stocks.

REALIZE AN OPPORTUNITY

This ability to realize an opportunity is a mental ability. I don't know whether they are going to develop synthetic brains that will help us realize an investment opportunity; I certainly hope they do. It would be wonderful to have on our research staff three or four good electronic brains.

While flying out here, I was reading the talks, and I had to think: What is the real essence of this thing; why is this called a revolution? That is what Dr. Ramo says is going to happen in the next twenty years; one of the biggest industrial revolutions the world has ever seen is going to develop. Twenty years is not a long while. There is something we have to realize.

MONEY MADE OVER A PERIOD OF YEARS

People in our business are usually not really interested too much in what happens over a period of years; yet history shows that is where the real money is made. Those few people that do have a feeling, a realization, of what is going to happen in a period of years make money from their opportunities. We have seen it in the chemical industry. We have seen how such fortunes were made in antibiotics. How many of us made them? We weren't unaware these things were happening. We knew of them, we read about them in the paper; yet we didn't have the feeling of the tremendous speed with which a great thing can be developed.

Mr. McKnight showed us a magnetic tape. It has been only during the last ten years that the manufacture of such tapes has become a big business. Ten years is a short while. Let us try to look at this revolution, which is going to happen and make fortunes for a great many people. Let us try to get in on that revolution and make some fortunes ourselves. How are we going to realize them?

One thing we have to think of: If it is going to develop in twenty years, every year is going to see a lot of progress. Five years from now this is going to be a much bigger business, or it will not amount to a revolution in twenty. Let us assume that synthetic brains and other branches of electronics is a $20 billion business in 1972, which would be one of the largest in the country as Dr. Ramo says. We ought to set up a chart, and draw a curve on this chart showing where it should be in 1957. We ought to get started now finding out why it is going to be so big, how fast, and who are some of the people who are going to get benefits from it.

I think the reason it is going to be so big is that it is fundamentally very simple. What we have is the industry of physics growing up. We have forces of nature which have been discovered, and gradually technicians have found out how to use them. It is very similar to the industry of chemistry which has grown up the last twenty-five years. Those of you who attended the chemical forum heard the experts say that 7 million pounds of synthetic organic chemicals were manufactured in 1920; now there are 7 billion pounds. A change of a thousand times in thirty-odd years.

We have to try to see the future in our terms, as very simple people with only a few of these tubes which Dr. Ramo says are in our brains working. We have to see what is the essence, why it is going to be so big. The essence is the electron. The electron has certain properties that are of tremendous value, and these properties are now being utilized in a great many ways. The electron has terrific speed. It can move commercially at around 100,000 miles per second. It has almost no weight. As machinery becomes electronic, it gathers speed. For instance, if a steel mill could be run electronically, could be sped up to the speed of electronics itself, we could produce 100 million tons of steel in a few seconds. There is no reason why this is not possible, except for elements of weight. Perhaps some of this will be accomplished. Even now mills are rolling steel faster than one mile a minute. Perhaps electronic mills will roll it at 300 to 400 miles per hour. This would mean more steel, shorter working hours, and higher pay.

SPEED HAS BROUGHT US WEALTH

If we look at the history of the industrial revolution from its start to the present, speed has brought us great wealth. Wealth and speed are much the same thing. The steam engine brought wealth because it brought speed; then the car, the airplane, those were all new achievements in speed. It is going to be possible to use speed in a very short time in ways that were unbelievable a few years ago.

My grandfather who came over in a sailboat was around when the steam engine and railroads were built. When the steamships were built, it never occurred to him he could get wealth for himself by putting some money in that new business. He read about steamboats in the paper, he admired them, but he was afraid to invest in them. We have the same situation today.

The electron is no more amazing than steam was a hundred years ago, but it is in our time, and we have this opportunity. What I am trying to say over and over again is that to make money an investor must not only be intellectually aware that a great new development is taking place — as we in this room all are by now and as my grandfather was about the steamboat a century back. If we are to succeed, we must gain the power of conviction, the feeling that the opportunity is here, the bell has rung, and we ought to find out the precise practical way to invest our money.

PROFIT MARGIN

One of the factors we are all concerned with is profit margin. There are some growth industries that have not given the investor a good return. How does this industry stand to the point of making money? Some of the companies I have looked at have a pretty good record of making a good profit. Some small companies I saw down in Los Angeles and Pasedena have their prospectuses out. You should look at their ten-year trend line, not only of sales, but of profit margins. Ten years is a pretty good indication of the nature of the industry, whether profits can be made as sales grow. I think that about concludes my speech. I think we have this opportunity. I think we must develop a feeling about it that will enable us to exploit it. *(Applause)*

* * *

Chairman Podolak: Thank you indeed, Walter Gutman! I guess this breaks up the meeting, gentlemen, unless you would like to stay for questions. I know your allotted time has long since gone by. We will therefore stand adjourned.

NATIONAL DISTILLERS
PRODUCTS CORPORATION

DIVIDEND NOTICE

The Board of Directors has declared a quarterly dividend of 50c per share on the outstanding Common Stock, payable on September 2, 1952, to stockholders of record on August 11, 1952. The transfer books will not close.

THOS. A. CLARK
July 24, 1952. Treasurer

Common and Preferred
DIVIDEND NOTICE

Shreveport, La.
July 23, 1952

The Board of Directors of the Company has declared regular quarterly dividends of 25 cents per share on the common stock, $1.12½ per share on the 4.5% convertible preferred stock, and $1.18¾ per share on the 4.75% convertible preferred stock of the company, all payable on September 2, 1952, to stockholders of record at the close of business August 1, 1952.

Secretary

TEXAS EASTERN
Transmission Corporation

SOUTHERN NATURAL GAS COMPANY
Birmingham, Alabama

Common Stock Dividend No. 54

A dividend of 70 cents per share has been declared on the Common Stock of Southern Natural Gas Company, payable September 12, 1952 to stockholders of record at the close of business on August 29, 1952.

H. D. McHENRY,
Secretary.

Dated: July 17, 1952

COTTON...CALICO...AND CHEMISTRY

Brightening up the summer scene, lively calico is a new fashion favorite among cool, colorful cottons. Today, calico and the many other cotton fabrics make up nearly three-fourths of all the clothing worn in this country. In part, this can be attributed to the remarkable development of agricultural and textile chemistry.

Take the cotton grower; chemicals in the form of fertilizers, insecticides and herbicides are primarily responsible for his being able to nearly double the yield of his cotton acreage. Moreover, new developments in chemical processing and finishing methods have greatly contributed to improvements in cotton fabrics.

Today, Mathieson is one of America's leading producers of the chemicals used to grow, process and finish cotton. Throughout the growing areas, Mathieson's modern fertilizers and insecticides are widely used. And Mathieson basic chemicals have been known and recognized for quality by processors and finishers of cotton fabrics for 60 years. There's a new power behind the throne of King Cotton—chemistry—helping maintain his position as the most useful of all fibers.

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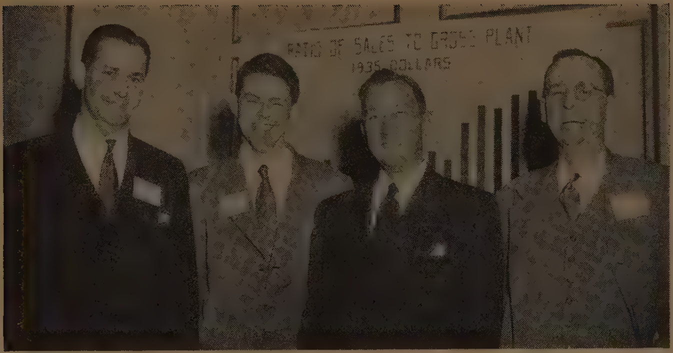

RATIO OF SALES TO GROSS PLANT
1935 DOLLARS

George Shimmon

Speakers at the chemicals forum foresee a bright future for the industry *(left to right):* John D. Fennebresque, Bruce R. Carlson, Paul L. Davies, and Jeremy C. Jenks, chairman

TUESDAY AFTERNOON, MAY 6, 1952

JEREMY C. JENKS, Cyrus J. Lawrence & Sons, New York, presiding.

Chairman Jenks: Ladies and gentlemen, our first speaker this afternoon on the chemical forum was born in Nebraska, attended the University of California, and went on to the Harvard Business School. He started his business career with the National Bank of Commerce in New York and then came out here to the American Trust Company. In 1929 he joined the Food Machinery & Chemical Corporation as vice-president and treasurer and rapidly advanced in that organization. Among his outside activities, he is on the board of directors of the American Trust Company, he is a trustee of the Committee for Economic Development, a member of the business advisory council of the Department of Commerce, a director of the Manufacturing Chemists Association, and has many other attainments and honors. He is one of the truly great industrialists of this generation, and I am delighted to introduce Mr. Paul L. Davies, president of the Food Machinery & Chemical Corporation. *(Applause)*

* * *

Paul L. Davies: Thank you, Mr. Jenks. Ladies, and members of the National Federation of Financial Analysts, I am a little embarrassed after that introduction. I hardly recognized who the devil he was talking about. When I was asked by your committee chairman to talk on the subject of the "Chemical Growth of the West," I was quite surprised, for, as most of you know, the advent of our company into the chemical industry does not date back many years. So far, our part of the industry has been a very small one. By now, you are all undoubtedly very much aware, as I am continuously aware, of the vast expanse of country included in what is known as our eleven western states. In arriving in San Francisco you have traveled well over a thousand miles westward since entering Colorado. It is an even greater distance from the Canadian line to the Mexican border. This represents a total area of over 1 million square miles, or more than a third of the entire United States. In contrast, we only have 15% of the total population, which means a density of less than one-third the national average.

At these forums you have heard about some of our tremendous natural resources such as water, timber, petroleum, and minerals, which exist in this area. You have seen how some of these resources have been put to work in the open-cut mining operations of Kennecott Copper at Bingham, Utah; the U.S. Gypsum plant at Gerlach, Nev.; and the power plants of Pacific Gas & Electric at Feather River Canyon.

GREAT DISTANCES TAKEN INTO ACCOUNT

You have had an opportunity to see and appreciate the great distances that must always be taken into account in the growth planning of the West. Such distances have encouraged our self-sufficiency but at times have made difficult the development of certain industries. In spite of this natural barrier, we are today seeing evidence on every hand of western industry's ability to achieve an ever-increasing stature in our national economy.

Development of the western chemical industry has already become an important factor in the growth of this area. However, in my opinion, only the initial steps have been taken in bringing together those elements essential to a well-integrated industry. As this integration progresses, I am sure you will see the western chemical industry play an increasingly important role in our future industrial development.

THREEFOLD INCREASE

Since the beginning of World War II the chemical industry of the United States has experienced, in terms of production, more than a threefold increase. Our western chemical industry has expanded even more rapidly. Not only has it kept pace with the national development, but during the same period its participation has also increased from 4 to nearly 6% of the total.

In contrast, chemical consumption in the eleven western states accounts for some 8% of the national total. Because large-scale investment is generally inherent in the establishment of chemical processing facilities, it is understandable that western consumption of chemicals is somewhat ahead of western chemical production. This will be gradually reduced as the western market for individual products increases sufficiently to justify installation of economically feasible units of chemical manufacturing capacity.

LARGE AND COMPLEX

The western chemical industry is too large and complex for us to consider here today all of the important possibilities for development. I do believe, however, that it is desirable to cover the principal factors that form the foundation for continued expansion in this part of the country. I would like to discuss this subject in a manner that will make it possible for you, as security analysts, to leave here today with a clear understanding and appreciation of the fundamental problems that management must face continuously in its struggle to extend the position of the western chemical industry. I would like to gain your appreciation of our problems, since we in management must rely on you to carry out objectives to the investment world.

The chemical industry is divided into two main branches: namely, the fields of organic and inorganic products. Organic chemicals are derived from petroleum, coal, natural gas, wood, and sugars. These raw materials make possible, for instance, synthetic fibers including rayon, Orlon, nylon, and Dacron; liquid detergents such as Joy and Glim; synthetic rubber; and various plastics. This field has experienced a spectacular growth in recent years. I am sure that Mr. Fennebresque of Celanese Corporation, who follows me on the program, will have a most interesting presentation on this subject. I will not, therefore, touch on this phase of the industry other than to say that it is of substantial interest to our company, since we are a significant factor in the manufacture of such products as plasticizers and organic insecticides including DDT and benzene hexachloride.

FIELD OF INORGANICS

The other part of the chemical industry, and that which I have been asked to discuss today, is the field of inorganics. This phase of the industry derives its products in large part from mineral deposits. Inorganic materials, such as soda ash, caustic sulfuric acid, and chlorine, are the basic implements of the entire chemical industry. Normally referred to as heavy chemicals, they are characterized by large plant investment both in total and per dollar of sales.

This type of industry usually contemplates a long-term payout rather than a rapid investment recovery. It is the type of industry that is created when there is sufficient market opportunity to gain a minimum foothold. Once this position is secured, however, it provides a steadily increasing market opportunity. With each expanded increment of capacity brought about by this growing opportunity, a more favorable payout occurs. Furthermore, when a position of this type is firmly established, it is difficult for competitive forces to undermine it seriously. This type of chemical industry investment provides the sound opportunity for growth that companies such as ours consider attractive and constantly seek.

With these points in mind, I think it might now be appropriate for us to consider the problems that chemical industry management must face in furthering growth in the West. Fundamental in this regard is the existence of a suitable market. Where this market occurs inside the natural boundaries of the West, population is perhaps the most significant factor bringing about growth. For the ten-year period ending in 1950, the entire population of the United States increased 14%—the population of the eleven western states increased 40%. There is every evidence that the rapid expansion in population in the West will continue at an accelerated rate. It would, therefore, seem evident that a substantial increase in chemical manufacturing in this area will result from this factor alone. In addition there are, of course, situations where the development of a new product or application will result in chemical expansion without attendant consideration to population growth. Conditions that make it possible to compete in markets outside of our area usually anticipate the West being in a unique position with regard to raw materials or some combination of natural resources.

In order to translate such market opportunities into a profitable venture, there must also exist a suitable relationship of certain essential elements such as power, transportation, population, and raw materials. These elements are of varying importance in each case, and must be carefully weighed in order to reach a proper decision in regard to any specific raw material situation.

Previous speakers have adequately described the past growth, current position, and future prospects for the West in regard to such of these elements as power, transportation, and population. These are essentials for the healthy development of any industry. In chemicals, however, the prime requisite for such development is an adequate availability of raw materials. It is in this connection that the West possesses its most attractive asset for potential long-term growth in chemical manufacture.

I would like to touch on some of the more important inorganic raw materials that occur in relative abundance in the West. In doing so my main objective is not merely to describe these assets in statistical terms, but rather I would like to illustrate for you chemical industry managements' experience in translating these latent assets into realizable profits.

SALT A PRIME RAW MATERIAL

Salt is one of our prime chemical raw materials both nationally and in the West. It is responsible for the all-important intermediate chemicals of chlorine and caustic. These intermediates, in turn, are basic materials for processes like the bleaching of pulp and paper and the refining of petroleum, and they contribute to the manufacture of such well-known end products as rayon, cellulose film, textile processing, pulp and paper, and insecticides. I think salt provides an excellent example of a well-integrated western chemical development.

The West's principal source of salt production is located about 35 miles south of here at the Leslie Salt Company's operations on San Francisco Bay. Leslie's process is unique in that it relies on sunshine rather than mechanical means for brine concentration. It takes advantage of this area's availability of unlimited quantities of sea water adjacent to immense areas of low-cost land and a favorable evaporation-rainfall balance.

The salt industry was originally established long before

1900 to supply the then small food-processing industry in this area. This provided a necessary foothold. As the development of the West proceeded, a point was reached where the demand for the electrochemical products of chlorine and caustic was sufficient to consider the establishment of a new industry. The availability of salt as a raw material made it possible to establish this electrochemical industry. It is possible the electrochemical industry alone would not have been able to justify another source of this essential raw material and would have seriously delayed its entry into the West.

ELECTROCHEMICAL INDUSTRY

The electrochemical industry has not only been responsible for expanding the demand for salt, but also has been instrumental in furthering the development of other industry in this area. Evidence of this resulting integration may be seen in the more than 300% increase in salt consumption since the beginning of World War II.

This is indicative of the type of development that must take place in order for many of our other strategic raw materials to be utilized most effectively. By the same token, it provides an insight into the potential available from many of our western raw materials which so far have found only a limited diversification in end use application.

Another of the West's most important resources is phosphate rock. This material occurs in extensive deposits underlying many square miles of Idaho, Utah, Wyoming, and Montana. Reserves of commercially usable rock have been estimated in billions of tons and represent over half of the total reserves in the United States.

Consumption of phosphates in the West is largely the story of a material serving two major markets. For many years phosphate rock has been consumed in the manufacture of fertilizer materials. More recently, in the form of elemental phosphorus, a substantial demand has been created for use in synthetic detergents. In the last ten years production of phosphate materials has increased four times in the West, compared with only twice for the entire country.

PHOSPHORUS PRODUCTION

In contrast to the salt industry, initiation of elemental phosphorus production in the West typifies the development of a raw material still in its initial stages of market integration. Though it is not my intention to belabor our own company situation, it seems to me that some of the problems with which we have dealt serve to illustrate exceedingly well managements' problems of developing these western resources.

Recognizing the long-term potential of these vast phosphate deposits, coupled with the low-cost power available, our company five years ago constructed the first electric furnace facilities in this area for processing rock into elemental phosphorus. The resulting concentrated materials now make it possible for another of these potential western resources to compete favorably on a national basis in the market for this increasingly important phosphate. Western operations will become even more significant with the further depletion of limited reserves in Tennessee.

In retrospect, this decision to move ahead may appear to you to have been an obvious one; however, as with most of these situations, it actually was dependent on the coming into balance of a number of complex and interrelated factors. In substance, these resulted from the West reaching a point in its growth where consumption of synthetic detergents was sufficient to provide a balance in freight cost distribution such as to permit us to compete profitably on a national basis. It would not have been possible to justify installation of even the minimum initial increment of capacity if we could not have competed in this national market.

It may be expected that the demand for those products derived from phosphates will find continued growth. In addition to synthetic detergents, phosphates find application in the baking, petroleum, and pharmaceutical fields. Positive evidence of our faith in the future of this market is the fact that we are now completing installation of the fourth large furnace at Pocatello and have a total investment in phosphate facilities and phosphate-processing facilities in excess of $25 million. It is interesting to note that the two other major chemical companies in the phosphate field, Monsanto and Victor, have subsequently built or are now building phosphate-producing facilities in the West.

SODA ASH

Soda ash, with a national production of over 5 million tons per year, is another of the chemical industry's most important inorganic materials. It finds widespread application in the manufacture of glass, aluminum, wood pulp, and soap. The West has a unique position with respect to this material, since huge deposits of impure natural soda ash occur in this area. It can be recovered at a much lower capital investment per unit of capacity than in the usual case where it is manufactured from salt and limestone. However, since it is a heavy chemical selling at a relatively low price, transportation costs are a major economic factor. At the present time western production is centered in California, and such production accounts for approximately 5% of the national total. There are several producers, including American Potash, and West End Chemical Company.

Soda ash is one of those materials that are so much a part of our economy that it offers a sound long-term growth opportunity. On an average its usage has increased 5% annually over the past twenty years. This coupled with the West's unique raw material position makes for a situation attractive for western development. With your permission I would like again to discuss our own experience in an effort to point out to you the factors that must have consideration in laying the groundwork for taking advantage of basic raw material situations in the West.

As you may know, our company with National Distillers Corporation as a part owner recently formed Intermountain Chemical Corporation and initiated exploitation in Wyoming of the only known underground deposit of trona, an impure soda ash. This deposit occurs at a depth of 1,500 feet, and core tests indicate that a minimum of 150 million tons of trona exist in this massive bed. This deposit alone is sufficient to supply the entire requirements of the United States for thirty years. Refining facilities are now under construction which will make possible the production of some 300,000 tons of soda ash per year. As a result, by 1953 the West will for the first time become a substantial exporter of this material to other sections of the country. It is our belief that the large-scale availability of ash in this intermountain area will attract substantial additional chemical manufacture. This initial 300,000 tons of capacity will require an investment of some $16 million. It represents the first major investment in new soda ash capacity since 1935. The reason for this is that new capacity based on the conventional method of manufacture cannot be justified at present costs.

COMPETITIVE POSITION WILL IMPROVE

As the over-all market expands sufficiently to justify additional capacity, our relative competitive position will improve. For instance, a second increment of 300,000 tons capacity will only require an additional investment of $7 million, or a total investment of $23 million for the combined 600,000 tons. An equal capacity in new conventional-type facilities would require an investment of in excess of $50 million.

It is not possible in the limited time available to discuss all of the opportunities for "Chemical Growth in the West." In order to cover the subject adequately we should include a number of other raw materials. For instance, western potash is one of our most important material resources. It supplies the entire United States requirements of over 2 million tons per year. Principal use of this material is in fertilizers, and we expect with increasing agricultural demands that potash can look forward to a constantly expanding future.

SULFUR

As for sulfur, it has become increasingly evident that the long-established sources cannot be relied on to supply adequately our ever-growing demand. The West, therefore, has a real incentive to develop local sources of this material. Steps have already been taken in this direction, with some 225,000 tons per year of sulfur equivalent being recovered from oil and natural gas plus an additional 60 thousand tons from smelting gases. Similarly, we might discuss other materials such as borax, barite, magnesite, and fluospar, all of which are playing important parts in the development of this area.

STRONG POSITION HELD BY WEST

I hope I have been able to illustrate in this rather sketchy outline the strong position held by the West in the most essential basic element for long-term chemical industry growth: namely, a large and valuable stockpile of raw materials. Under present-day economic conditions of continuing inflation companies having a well-entrenched position in these chemical raw material sources are indeed fortunate. In order to capitalize fully on these assets, however, it is necessary for management to devise ways and means of making such material available in a desired and usable form wherever the market may exist. It is necessary that risk capital be available to assist in the development of these natural resources.

In conclusion, I am sure you will agree with me that, owing to the continued population growth in the West and the extensive deposits of raw materials, an optimistic forecast for continued growth of the western chemical industry would seem to be based on sound premises. *(Applause)*

* * *

Chairman Jenks: Thank you very much, Mr. Davies.

Our second speaker on the chemical forum this afternoon is a graduate of Yale University. He went to work for the Monsanto Chemical Company in July of 1939 and stayed there until 1943, when he joined the office of the Rubber Administrator as a member of the Research and Development Staff. In 1944 he joined Celanese Corporation but spent several years as a dollar-a-year consultant to the director of the rubber bureau of the War Production Board. In 1945 he served overseas duty with the technical and industrial intelligence committee of the Joint Chiefs of Staff. He served on advanced field teams, going with Armed Forces as they took over industrial areas. This work was primarily on the over-all appraisal specifically of synthetic rubbers, synthetic petroleum, and poison gas. In 1946 he became general manager of the chemical division of Celanese Corporation of America and last December was elected vice-president. He has a number of outside activities. A few of them include being a director of the Canadian Cellulose Company, vice-president and director of Petrocal Corporation, a member of the chemical industry advisory committee of the National Production Authority, and a member of the petrochemical committee of the Office of Price Stabilization. He seems to be a very busy man. I wonder how he gets any time to work for Celanese. He has recently been given greater responsibilities in the management of Celanese, and those who know him well predict a brilliant career for this very able executive. It gives me great pleasure to introduce Mr. J. D. Fennebresque, vice-president of Celanese Corporation of America. *(Applause)*

* * *

John D. Fennebresque: Mr. Chairman, ladies and gentlemen, with that wonderful introduction, which I did not expect, I feel that probably it would be better for me to stop right now before you draw conclusions to the contrary *(Laughter)*, inasmuch as the name "Celanese" is usually associated with the textile industry, and with the courtesy of Mr. William Edwards, I feel like a half-drowned survivor off the beach of Dunkirk. *(Laughter)*

Twenty-five years ago the chemical industry in the United States was an infant; the word petrochemistry had hardly been coined; there were few plastics to substitute for metals; synthetic fibers had made little impression on the textile market. There were practically no chemical fertilizers to give us better food yields, no synthetic insecticides to control pests selectively, no inexpensive solvents to give us quick-drying paints, no tailor-made wonder drugs to stop disease.

Vast quantities of natural resources were untapped or wasted. Nitrogen in the air was not yet available at low cost to be utilized for the production of ammonia fertilizers. There were flares at every oil well and refinery, wasting what was considered to be valueless natural gas.

In 1927 we thought of the rapid growth of our economy as the steel age. The steel age had taken decades to reach maturity. Yet in twenty-five short years we have come far, very far beyond the stage of industrialization of the late '20's. Gentlemen, we have now come to the chemical age. And the startling part of this chemical age is that with all the achievements of the past twenty-five years the chemical industry has not come close to reaching its full potential!

BILLION-POUND ANNUAL PRODUCTION

This may seem to be an exaggeration in view of the tremendous growth in the past ten years. Chemical detergents have reached a 1-billion-pound annual production—over one-third the total soap production. Production of the first chemically reacted manmade fiber, cellulose acetate, grew from under 1 million pounds in 1927 to nearly 600 million pounds in 1951. Plastics production rose from a few hundred thousand pounds to 2.6 billion pounds during this period. Nevertheless, we are only in the first phase of the chemical age.

FIBER GLASS AUTO BODIES

It is not too far fetched to foresee steel automobile bodies replaced with light, strong, corrosion-proof, nonbendable bodies made from fiber glass and a petrochemical-derived plastic. We have already started producing synthetic lubricants superior to those from oil. We can also foresee synthetic gasoline and many chemicals from the gasification of coal. The petrochemical industry contributed toward winning World War II with the development and production of synthetic rubber. It is through chemical-processing techniques developed in the petrochemical industry that we are able to produce the uranium for atomic bombs—which I believe has already postponed and we all pray may prevent another World War.

PETROCHEMISTRY

And how did we come to this chemical age? Probably the most important contributing factor was petrochemistry. By this I mean—and in my opinion this statement in itself is a sufficient definition of petrochemistry—the use of petroleum and natural gas as raw materials for chemicals and the utilization of petroleum-processing techniques in the production of these chemicals.

3 MAJOR CATEGORIES

Before the advent of petrochemistry, the raw materials for the chemical industry fell into three major categories: agricultural products, coal by-products, and mineral products. Agricultural products fluctuated widely in price, availability, and purity. Coal by-products were dependent on the production of steel and were insufficient to meet demand. The mineral products were limited primarily to the manufacture of inorganic chemicals. Petroleum and natural gas presented the budding chemical industry with tremendous, dependable, pure, and economical sources of carbonaceous material which, by petrochemical methods, could be converted into a large variety of organic chemicals. Production of these organic chemicals in turn required large quantities of inorganic chemicals. Thus the backbone of this chemical age is organic chemistry which came into full being through petrochemicals.

VERY RAPID GROWTH

As you know, the chemical industry has had a very rapid growth, even when compared to the large expansion of our whole economy. It grew from approximately $700 million in 1927 to $7 billion today—an increase of tenfold. The national economy grew during the same period fourfold. But petrochemical growth has been even more spectacular! Twenty-five years ago 7 million pounds of petroleum raw material were consumed by the petrochemical industry. In 1950, seven billion pounds were consumed to produce 14½ billion pounds of finished products. This is a one-thousand-fold growth. The investment in petrochemical plants is about $1½ billion. Twenty-five years ago it was insignificant. On top of this, an additional $339 million in new plant construction has been certified for accelerated amortization by the Defense Production Authority. Over 80% of the aliphatic organic chemicals and 33% of the aromatics come from the petrochemical industry. In 1927 this was less than 1%.

What have been the dominant factors contributing to the large growth of the petrochemical industry? Broadly speaking, there are three:

1. The immense availability of pure and varied raw materials that do not fluctuate widely in supply and price.
2. The development of many new process techniques and products.
3. A highly diversified consuming market.

The first of these, availability of raw materials, overcame the growth limitation of inadequate supplies of other natural resources. The chemical expansion has been large. However, natural gas and petroleum reserves and production are tremendous. The petrochemical industry consumes less than 1% of the total daily production of petroleum and natural gas products. The known petroleum reserves are larger today than ever in history.

PETROLEUM COMPOUNDS

Petroleum is not one but several hundred varied compounds—from the simplest methane to those containing 30 and 40 methane groups. Each of these is a potential starting point—a building block. The products derived from them thus are innumerable—from ammonia which gets its hydrogen from methane to chlorinated waxes used as lubricants and plasticizers for film. Not only this but many petroleum materials, such as isobutene and ethylene, will react with themselves to give long-chain polymers. The first of these produces butyl rubber, with which you are familiar. The second yields the remarkable new inert plastic, polyethylene.

AVAILABLE IN PURE FORM

These petroleum compounds are available in relatively pure form. This overcomes previous difficulties encountered with agricultural product raw materials. Molasses which was once the raw material for ethyl alcohol, butyl alcohol, and acetone is a complex mixture of compounds. Thus many impurities turn up in the finished product, causing difficult separations. An important consideration is the fact that petroleum raw materials do not fluctuate widely in price and availability. Not only do agricultural raw materials vary in chemical composition from one shipment to the next, but also they vary widely in supply—and thus price—with crop yields. To continue our illustration of molasses, this raw material, which comes mainly from Cuba, went from 34 cents per gallon to 5 cents and back to 20-odd cents in a two-year period recently. This caused ethyl alcohol to fluctuate from 17 cents per gallon to over $1. The stability of petroleum raw material supply eliminates the feast and famine type of production and allows for steady and good customer relations.

The second factor in the growth of petrochemicals is the development of many new processes and techniques. This resulted from extensive research and also from the large number of pure raw materials available from petroleum. Taking a lesson from oil refineries, the petrochemical industry developed its own continuous-production techniques, polymerization reactions, solvent extractions, high-pressure cracking, and fractionation.

CONTINUOUS PRODUCTION OF MAJOR IMPORTANCE

The first of these, continuous production, is of major importance. It is possible because natural gas supplies are large, steady, and continuous—all needed for continuous type of operation. Before petrochemistry, the batch-type operation dominated, since continuous production was difficult, owing to inadequate and uncertain supply. Continuous production results in lower overhead, greater throughput and smaller equipment. It means less wasted man power and time, reduction in some processing steps, and uniformity of product. Another technique that came to maturity with petrochemicals is production instrumentation. Many petrochemical plants practically run themselves. The one with which I am most familiar, Celanese's Chemcel plant, turns out many hundreds of millions of pounds of chemicals annually with less than 200 operating personnel. Outdoor construction in the Gulf Coast area has been a factor in petrochemical plants. This has meant a saving in plant investment.

NEW AVENUES OF RESEARCH

The purity and great variety of petroleum raw materials has made possible new avenues of research, production flexibility, and entirely new processes. It means that the number and types of chemical products that petrochemistry can make are almost unlimited.

CHEMICAL REACTIONS IMPROVED

Known chemical reactions have been improved and new ones developed. Among these are polymerization, isomerization, oxidation, and high-pressure synthesis. Reactions that were previously considered commercially impossible have been developed. Twenty years ago the oxidation with air of petroleum hydrocarbons to produce simultaneously and continuously many industrial chemicals (the Celanese process) would not have been considered feasible.

PRODUCTION AT LOWER COST

Petrochemical improvements in old processes have increased demand by giving more production at lower cost. Ammonia, the chemical that has given such an impetus to better agricultural yields, came entirely from coal twenty years ago. Today nearly all of it comes from natural gas. Its cost means that it is possible for the farmer to make fertilizer pay big returns.

NEW PROCESSES AND PRODUCTS

Entirely new processes and products have been developed. We have mentioned synthetic rubber, which is cheaper than the natural product and superior in some characteristics. Synthetic fibers are the latest development—acetate, nylon, Orlon, Dynel, Dacron, to mention some. Propylene, a petroleum product once wasted, now is used to make glycol antifreeze, glycerine, synthetic detergents, and the oil companies have found a way to use it for valuable high-octane gasoline.

DIVERSIFIED CONSUMER MARKET

The third factor affecting the growth of the petrochemical industry is the widely diversified consumer market. Chemical products literally find their way into every phase of our economy: into such varied uses as counter tops, ethyl alcohol, cosmetics, and bedspreads—from the bar top to the boudoir.

MAJOR MARKETS

The major consuming markets for petrochemicals may be classified as including plastics, rubber, plasticizers, synthetic fibers, paint and protective coatings, fertilizers, automobile chemicals, insecticides, pharmaceuticals, and detergents. This large number and the wide diversity of end uses have added stability to the petrochemical industry. It is seldom that reduction in demand of all these markets occurs at the same time! This fact has meant that the chemical industry has weathered economic storms better than some other industries. This does not mean to imply that the petrochemical industry is immune to business cycles, but it is a fact that chemical sales volume steadily increased during the recession years of the '30's.

THE INDUSTRY IS SELF-GENERATING

A phenomenon peculiar to the chemical industry is that it is self-generating. Chemical companies buy from and sell to and compete with other chemical companies. The growth of one segment of the industry generates growth in all segments.

EXTENDED INTO MANY INDUSTRIES

Petrochemicals have extended into many industries. Inorganic and other chemical industries have entered the petrochemical field for new and more economical products; oil companies entered while improving fuel quality, rubber companies for synthetic rubber. Textile companies turned to this field to produce new synthetic fibers. Witness the new joint ventures formed: Jefferson Chemical, owned jointly by American Cyanamid and the Texas Company (chemical industry plus oil industry); American Petro-Chemical, owned jointly by Firestone and Cities Service (rubber industry plus oil industry); Chemstrand, owned jointly by American Viscose and Monsanto Chemical (textile industry plus chemical industry).

Practically every industry of our country has participated in or been aided by petrochemistry. Chemical products at lower costs have brought many products into the price range of the average citizen. Plastics reduce the cost of radio and television cabinets considerably. Chemical adhesives utilize waste sawdust to produce a useful new building board. Detergents make easier the housewife's washing tasks.

THREE MAIN FACTORS

We have discussed the three main factors contributing to the growth of the petrochemical industry. What are the considerations for the future growth? Are not the costs of petroleum raw materials increasing? Natural gas is no longer an unwanted by-product. Petroleum products are deliberately converted to chemical raw materials today. Petroleum and natural gas have a dual value: as a chemical raw material and as a fuel. Their cost as a chemical raw material is determined by their value as a fuel. With the advent of many new natural gas pipe lines, gas becomes accessible to the demand of the very large domestic fuel market. Both from the purchasing power standpoint and social and political considerations, the home owner has first call for natural gas. This, however, does not place a limitation on the use of petroleum and natural gas as the most economical chemical raw material source. Gas is still worth more as a chemical raw material than as a fuel. Also petroleum reserves are more than adequate to supply both markets. It simply means that petrochemical companies must take into consideration the increase in demand as a fuel, and the increase in cost of petrochemical raw materials. Some of the companies in the petrochemical industry have protected their supply by developing their own source of raw materials through oil field leases and long-term contracts. These petrochemical companies are entering into the oil business and developing their own reserves. As an example, Celanese Corporation has formed a subsidiary, Petrocel, which is exploring for petroleum and for natural gas.

INDUSTRY LOCATION

Another consideration in the growth of the petrochemical industry is its location. In all, 80% of the petrochemical industry is now situated in the Gulf Coast area. This has brought about substantial industrialization of this area, numerous supporting industries, increased population, and the creation of large local markets. Most companies today still favor the Gulf Coast area for petrochemical plant locations. This location makes possible more than one source of supply, dependability of supply, and lower raw material costs. Even though many large chemical markets are in the East and the Midwest, the finished product is usually better able to carry transportation costs than the raw materials. This is particularly true where water shipments are practical. Many companies have found they can offset high transportation costs by barges and seagoing tankers to East Coast and Mississippi River ports.

ANOTHER TENDENCY SIGNIFICANT

However, there is also another tendency in the petrochemical indusrty that has become significant. Now that there are natural gas pipe lines in almost every part of the United States, it is possible to locate petrochemical plants near these pipe lines. This results in locating the chemical plant nearer the consuming market. Several companies have located plants of this nature in the Kentucky-Tennessee area.

WHAT ABOUT DEPLETION?

The inevitable question that arises in a discussion of natural resources, particularly petroleum, is: What about depletion? How many times have you heard in the last fifteen years that oil resources will be used up shortly? And yet today, after large increases in consumption of domestic crudes, following the loss of the Iranian oil supplies, U. S. oil reserves are the highest in history. The rate of proving new reserves has actually increased. Today we have 27 billion barrels of oil reserves, equal to twelve years' supply at our present consumption. In 1940 we had 19 billion barrels. It was also pointed out that the petrochemical consumption is comparatively small. Even if it is doubled, it would use less than 2% of the total crude oil production of 6.4 million barrels per day.

These favorable factors do not mean that petrochemical companies are complacent. They are aware of the increasing demand for petroleum as a fuel and the resulting trend in price increases. They are aware of the eventual possibility of the decreasing raw material availability. They therefore recognize that future supply must be protected.

Oil companies started petrochemistry with waste products. Growth of petrochemistry made these by-products valuable raw materials. Oil companies entered into the chemical business. Fuel value of these raw materials is increasing. Now chemical companies are going into the oil and gas business to protect their raw material supply. Thus a cycle peculiar to the petrochemical industry is being completed.

That is the end of my prepared speech, and I would feel remiss in not adding another thought. In my assignment I did not visualize it requiring that I try to delve too much into the problems of the future, so far as industry is concerned. In rereading my speech, I find that one tends to get quite enthusiastic about the petrochemistry industry. I am enthusiastic about it. However, I believe that the entire industry in America, short of an all-out war, could be considered to be overexpanded today. In other words, installed capacity, in my opinion, is more than enough to take care of demand of the immediate future.

We are returning, gentlemen, to tough selling. I do not feel pessimistic about this, but we must be acutely aware of the job ahead of us. The buyer's market is what made the American free enterprise system strong, and I, personally, welcome the return to competitive challenge. *(Applause)*

* * *

Chairman Jenks: Thank you very much.

Our final speaker on the program today was born and raised in Chicago, but attended Stanford University in California. After three years in Naval Intelligence in the Pacific Theater, he took graduate work in accounting and statistics at Northwestern University. He has been with the fine investment council firm of Stein, Roe & Farnham since 1947, specializing in chemicals, drugs, textiles, rubber, and electronics. He has taught business statistics in the evening division of Northwestern University school of commerce. He is a member of the Investment Analysts Club in Chicago, and a member of the Chicago chapter of the American Statistical Association.

This relatively young man is already one of the country's very top chemical security analysts. Those of you who know him as I do appreciate his keen judgment, his careful yet intuitive mind, and his solid knowledge of the chemical industry. I am happy to introduce Mr. Bruce R. Carlson of Stein, Roe & Farnham. *(Applause)*

* * *

Bruce R. Carlson: Mr. Chairman, ladies and gentlemen, those remarks coming from Mr. Jenks are as highly appreciated as they are unmerited. Listening to these most interesting reviews of the growth potentials of the chemical industry, whether in terms of consuming markets, new products, or new raw materials, I am strengthened in my conviction that the chemical industry, despite the giant strides it has taken to date, still has a very long way to go in the future. The investing public seems to share this view and, I believe, will continue to do so, providing we as analysts are careful to point out that the climate for earnings which has prevailed for several years now was perhaps unusually sunny. The two years 1950 and 1951 were by all odds the most active period in the history of the chemical industry to date. With the general level of economic activity high, and with new capacity coming into operation day by day, production of industrial chemicals as measured by the Federal Reserve Board increased in each and every month from January 1950 until September of last year, when it reached 560% of the 1935–39 average. On the whole, earnings of the companies before taxes increased about 25% in 1951, and, although they paid taxes at very nearly the maximum rate under the present revenue act, demand for good chemical equities by investors was so strong that many of these stocks sold at all-time high prices during 1951.

Toward the end of the year, however, demand for some of the industry's products began to soften, reflecting lower activity in several industries which consume large amounts of chemicals. Textiles are probably the best example, but leather, paperboard, plywood, and paint might also be mentioned. At the same time, productive capacities for many chemicals were being increased by a capital expenditure program which is exceeded in total dollars being spent only by the petroleum and steel industries. Toward the end of the year, inventories of the chemical companies were larger in relation to sales than at any time since mid-1949, and the severe shortages that had prevailed in many lines in 1950 and the early part of 1951 were largely a thing of the past. Prices, which had been frozen early in the year by Government decree, are now being effectively held down for many items by plentiful supply. I would judge that there is little prospect of important increases in the general price level in chemicals in 1952; if anything, some reductions seem probable.

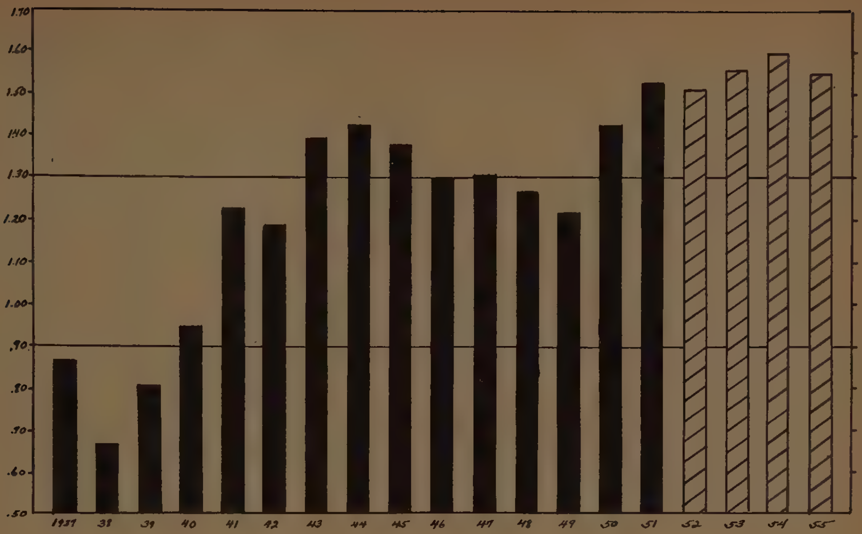
Since the end of World War II the chemical and allied industries using predominantly chemical processes have invested more than $5 billion in new plants and are reported to be planning additional facilities to cost another $5 billion by 1955. This projected expenditure equals roughly one fourth of the aggregate net plant investment of these industries at the end of 1951. In view of the near-term balance in the supply and demand for a good many chemical products, investors may well ask whether the projected additions to chemical plants are justified in relation to anticipated demand. After all, the investor must supply at least part of the money to finance these expansions, and the cost of building chemical plants is about twice what it was before World War II.

I think all of you will agree that the long-range outlook for growth in chemical consumption is good, especially when consideration is given to the almost endless variety of new products that can be developed from the basic materials such as the petrochemicals, phosphates, and other mineral materials about which we have heard from our guest speakers this afternoon. Nevertheless, when we see announced goals of a 50% addition to chlorine capacity by 1953, 50% more phenol, 40% more styrene, 35% more methanol, and so on, in the space of two years, we may wonder where all this growing tonnage is going.

Because I believe that the size and productivity of chemical plants are the best common denominator of the past and future growth of the chemical industry, I would like to spend a few minutes on this subject from a historical point of view. As Mr. Davies pointed out earlier, the tonnage output of the chemical industry in 1951 was between three and four times the prewar level. Despite the large sums that have been invested in new plants since the war, however, the present size of productive facilities is only about twice prewar because the postwar dollar has bought a lot less labor and materials of construction than it used to. Based on some studies I have made of combined data for 12 large general-line companies, the size of chemical plants has been increasing at an average of about 6% per year since 1937, while physical output has been increasing 11% per year in the same period. The difference lies in what I like to think of as the productivity of these plants, or the "plant turnover," as it is sometimes called.

The bar graph shows the relationship between output and plant investment when both are expressed in dollars of 1935 purchasing power. Over the years, the ability of chemical plants to produce has increased about 5% per year as a result of the process to which Mr. Fennebresque referred, better utilization of by-products, and other technological advances for which the chemical industry is justly famous. Note, however, that it has not been an uninterrupted rise. The contribution of prices to the expansion of sales volume has been modest, only 3% per year on average, and virtually all of this since World War II. Prices are now about 30% above the 1937 level, whereas the cost of new facilities is up 130%.

When these elements of plant size, productivity, and prices are broken down into four-year periods, as shown in the graph, several things can be seen more clearly: first, that the increase in size of chemical plants was greatest between 1945 and 1949, but that during that period the productivity of these plants declined rather markedly from the wartime peak when the industry was operating under



Ratio of Sales to Gross Plant
1935 dollars

forced draft, so to speak. After Korea, however, productivity rose sharply once again, with the result that output increased 36% by 1951 from the 1949 level, and sales volume, aided by somewhat higher prices, rose more than 50% in two years for the companies studied.

The second postwar expansion phase for the industry began in 1951 when the capacity of chemical plants of all types was increased approximately 10%. A further gain of 8 to 10% is anticipated in 1952, but thereafter the annual increase should drop back to about the normal 6% per year, based on surveys of building intentions in the industry at this time. What happens to the productivity factor is the important question to consider in projecting the growth in sales and earnings for the next four-year period. Between 1939 and 1941 this ratio rose from 0.81 to 1.23, or 50%, and after a slight dip in 1942 increased another 25% to the wartime peak of 1.43 in 1944. However, in 1937 through 1939 the chemical industry probably was not operating above 85% of capacity on average, whereas in 1950–51 it operated at 95 to 105% of capacity. Increases in turnover from this level will not come easily. Accordingly, I believe it is unrealistic to assume that the sharp improvements of the last several years can be continued indefinitely.

If we assume that the productivity factor remains about constant, profit margins might be expected to contract moderately, principally on account of the heavy capital charges which will be made to earnings under accelerated amortization of defense-related plants. More important, I believe we must recognize that the normal rate of plant expansion is currently being somewhat exceeded, giving rise to the possibility that a sudden downturn in the general business level, whether through curtailment or "stretch-out" of the rearmament program, or for any other reason, might result in a year or two of lower sales and sharply lower profit margins. This could be quite severe if the companies continued, as I believe they would, to take the five-year write-offs permitted on certified facilities.

I have shown in the graph the level of sales for the chemical industry which I shall be happy to see achieved. In the period 1952–55 I look for an average increase of 8% per year, or a total gain by the latter date of 32%, assuming that selling prices remain at or only slightly below the present level. For 1952 itself, an over-all gain of about 9% in sales seems reasonable for the major producers, compared to the 22% increase registered in 1951. I look for an average profit margin of about 26% before taxes, compared to 28% in both 1950 and 1951, and for pretax earnings for this year to be virtually unchanged from last. I would also venture the opinion that second half results will look somewhat better than first half and, furthermore, that there may be more than the usual disparity in the sales and earnings performance of individual companies within the group, some of whom, for example, have increased their tax bases materially by obtaining new capital.

Finally, I would like to say that, while I believe we as analysts must be aware of the possibility of a painful shakeout in chemical earnings, in the event of a sudden downturn in business activity, I also believe it is not only wise but also very desirable for the industry to undertake the maximum expansion of facilities it can safely handle under certificates of necessity. The chemical industry, along with the drug and other closely allied fields, has the peculiar problem that it requires extremely heavy capital investment to produce a dollar of sales, and at the same time is subject to a high rate of obsolescence on its plant. Therefore, the right to charge off new facilities over a period of five years, rather than at the lower rates ordinarily allowable for tax purposes is, to my way of thinking, one of the best incentives to both management and stockholders to invest in larger and better chemical plants, since it affords at least some protection against the risks of unforeseen obsolescence or temporary idleness. At the high prices presently being obtained for chemical equities, however, new commitments should not be undertaken without a clear understanding of the near-term risk that capacities may be temporarily overexpanded in certain lines, as well as of the longer-term growth potentials in which, like our guests today, I firmly believe. Selectivity is always desirable, but I think it is especially important at present to tailor chemical stock selections to individual investment objectives, keeping in mind the period for which the stock is to be held and, especially, the amount of adversity that the investor is willing and able to sustain during that period. *(Applause)*

* * *

Chairman Jenks: Thank you very much.

We have time for a short question and answer period. Gentlemen, if you have questions, would you stand up, and give your name, and your firm?

Julian D. Weiss (First Investment Company, Los Angeles): I would like to address this question to Mr. Carlson. Mr. Carlson, for the group of companies of which you have projected these earnings figures, would you briefly comment on the effects of this emergency amortization with particular regard to the possible cash flow? What I have in mind particularly is the difference between the purported earnings on an accrual basis and the possible cash generation reflecting the accelerated amortization.

Bruce R. Carlson: Mr. Weiss's question concerns the effect of the large expansion program under certificates of necessity on the cash flow, or, you might say, the cash earnings of the chemical companies as distinct from the reported earnings. I think it is a very important question and am glad he raised it, because that is really another way of stating my own conviction that this expansion is desirable. If we are willing to see some declines in the reported earnings after these accelerated amortization charges, the chemical industry will come out of that period with much more efficient plants, and will have those plants sooner than it would have been able to build them, if it had had to raise all those funds externally. Therefore, it seems to me that you should recognize the important distinction between reported earnings and cash earnings and realize that any temporary (we hope) drops that occur in reported earnings are not without their other side. Does that answer your question?

Mr. Weiss: Yes.

Olaf B. Lighthill (Gross Rogers & Co., Los Angeles): I would appreciate it if Mr. Carlson would give us about four or five chemical stocks that he likes at this particular time.

Mr. Carlson: The best answer I can give is that I am favorably disposed towards stocks of companies in the petrochemical industry and in the phosphate business. We know the rest of the answer. *(Laughter)*

Daniel R. Goodwin (W. H. Newbold's Son & Co., Philadelphia): I am wondering whether Mr. Davies would comment on the current market for chlorine?

Paul L. Davies: The question is whether I would comment on the current market for chlorine? From our standpoint — I cannot speak out on a national basis — the market for chlorine is still good. Though it isn't as short as it was a while back, there are still many projects coming in 1953 that are constantly besieging us: Would we be in a position to furnish chlorine for their plant? The problem in building chlorine plants today, as most of you know, is that, even though you obtain a certificate of necessity, the cost of the chlorine plant is approximately $100,000 per ton of daily capacity, and, if you had asked me about the caustic soda, which is the other side of the market, where every time your produce a ton of chlorine you have to produce one and one-tenth tons of caustic soda, I would have told you that the caustic soda market as such is not very good owing partly to some of our textile friends. As a consequence, I think we have a real problem facing us in the future: as we see it, a continuing growth in the chlorine market, even in spite of this expansion, and a more difficult problem in connection with caustic soda, which will probably result over the long term in chlorine going up and caustic going down. There is, as you know, a great deal of research and development work. Whoever is successful enough will hit the jackpot in finding a really commercial method of producing chlorine without the exponent caustic soda. Why, that is one of the chemical stocks that this gentleman over here inquired whether one should invest in. *(Laughter)*

Chairman Jenks: I think we have time for one more question. Did I scare you when I said we have time for one more question? If there are no more questions, we will stand adjourned, ladies and gentlemen.

MINNEAPOLIS GAS COMPANY
739 Marquette Avenue
Minneapolis 2, Minnesota

Common Stock Dividend

The Board of Directors of Minneapolis Gas Company, at a meeting held on July 10, 1952, declared a dividend of 27½ cents per share payable in cash on August 9, 1952, to common stockholders of record at the close of business July 25, 1952.

H. K. WRENCH, *President*

CONSOLIDATED NATURAL GAS COMPANY
30 Rockefeller Plaza
New York 20, N. Y.

DIVIDEND NO. 18

THE BOARD OF DIRECTORS has this day declared a regular quarterly cash dividend of Sixty-two and One-Half Cents (62½¢) per share on the capital stock of the Company, payable on August 15, 1952, to stockholders of record at the close of business July 15, 1952.

E. E. DUVALL, *Secretary*
June 19, 1952

CREPED PAPERS • GIFT WRAPPINGS
MARKING DEVICES • GUMMED PAPERS
TAGS • SEALS • LABELS
JEWELRY BOXES • COMMERCIAL BOXES

DIVIDEND NOTICES

Debenture: The regular quarterly dividend of $2.00 per share on the Debenture Stock will be paid Sept. 3, 1952, to stockholders of record Aug. 11, 1952.

"A" Common and Voting Common: A quarterly dividend of 30 cents per share on the "A" Common and Voting Common Stocks will be paid Sept. 3, 1952, to stockholders of record Aug. 11, 1952.

A. B. Newhall, *Treasurer*

Dennison Manufacturing Co.
Framingham
Mass.

108th year

Closing Dinner

FRIDAY EVENING

MAY 9, 1952

Harry R. Watson

At the closing dinner ***(left to right):*** **Y. Frank Freeman, Walter Podolak, chairman, and Harry W. Strangman speaking**

WALTER PODOLAK, Stern, Frank, Meyer & Fox, Los Angeles, presiding.

Alfred B. Post (Shearson, Hammill & Company, Los Angeles): Ladies and gentlemen, it is my pleasure to welcome you to the Los Angeles section of the first California Convention of the National Federation of Financial Analysts Societies and to introduce to you our chairman for the evening. In addition to being the driving force behind our Convention effort here in Los Angeles, he is vice-president and director of the National Federation, and President of the Los Angeles Society of Security Analysts. I am very happy to present to you Mr. Walter Podolak. *(Applause)*

* * *

Walter Podolak: Thank you all. That was a very fine introduction, and I don't know whether I deserve all of what you said. But, incidentally, the man who just spoke to you is Alfred Post, our vice-president, and he will, if parliamentary rules that we observe in Los Angeles, hold, be the next President of our Los Angeles Society next year. *(Applause)* I wonder if all of you know what I mean by "usual parliamentary procedures." If you had ever been to one of the Federation directors' meetings, you would understand what I mean. *(Laughter)*

Anyway, I very seldom attempt to prepare a speech, but I found that this time it was necessary. I wrote something on the way down on the plane yesterday, because I think in a final gathering of this kind it is necessary sometimes to change some of the ideas about what one may say. Some things became quite clear to me during the week's activities, and one or two points ought to be mentioned. We suddenly have become aware of certain steps in our progress that we hadn't realized before. So for the benefit of us all I'll spell them out.

This is the final major function of what will prove to be a memorable week. It is the first time in the history of the National Federation that the Annual Convention has been held on the West Coast. We here in California take pardonable pride in this area, and, when you think about it, it seems quite logical that California was selected because of its dynamic growth and progress. I think that it would be quite desirable for us to consider, in the future, holding Conventions as nearly as practicable near the sites of interest and educational value to the anlysts. After all, that is what we are out here for, to gain in knowledge, and, if we neglect to visit important points of interest in the country, we are that much poorer in ultimate knowledge.

ANOTHER MILESTONE

This is another milestone on the road of progress for the National Federation — therefore for our profession and, above all, for the people we serve, the investing public. We wish those people were more aware of the work we do; it would be to their advantage to know it, and it would help them in many ways. However, time and effort on our part, together with the time and effort of many others in our industry, will eventually solve the problem.

I think that our advance the last several years, as I mentioned before, has been quite subtle, but it has been sure. Though our advance has been unobtrusive, I think that it is appropriate to note it here tonight. I feel satisfaction in the fact that relations between industry and ourselves in general have been greatly improved. You will remember, there was a time in the past when it was quite difficult to obtain the attention of management — extremely difficult. During this Convention week it has been quite evident that these giants of industry we have visited and the officers and personnel who have spoken to us have given the fullest in co-operation, time, and money. This co-operation is, of course, the very life blood of our existence — our business. We can all learn to become good technicians through study, but without the supplemental help of the managers of American industry our efficiency would be greatly reduced. Co-operation between industry and our profession is entirely logical and necessary for enlightened progress in the management of money and for industry itself. Without the understanding and help of these many companies, this Convention would have been of much less value to all of us. The ability of our profession to merit the full assistance of industry in general marks an important point in our own progress. I think we can also take justifiable credit for the fact that investor ranks have shown some reasonable increase over the past few years.

FUTURE POLITICAL DESTINY OF OUR COUNTRY

The next point I should like to stress is aside from our business, but it is important this year. Few of us realize that we may hold the future political destiny of our country in our own hands. It is not beyond reason to visualize that, if we continue to improve our art, the time may come when, instead of 12 to 15 million stockholders — or 6 to 7% of the Nation — these ranks may grow to over 50% of the population. And I say, when that day comes, the demagogues and social planners in Washington, of all parties, will cease to be a threat to the free-enterprise system or our way of life: the threat will certainly pass away from us forever. If we had more investors in the United States, we would not have to worry about these threats in Washington today. This might be a secondary function of our business. It is certainly a worthy cause to work for. It will take time, but, through better and finer work, we can put America back on the track; it is long past the time. *(Applause)*

It is the hope of all of us that you have found real value in the week's activities. For those of you who have never visited the Coast and who have had other notions about us here, please bring home the message to eastern friends that the stagecoach has long since ceased to be a regular method of transportation in California. *(Laughter)* You can also tell them that we had to make no excuses in behalf of the California Chamber of Commerce to the Florida Chamber of Commerce this time.

Unfortunately, though we have had many requests, we do not have a starlet present for the knee of every bachelor present, although the man on my right might be questioned a little later on this because I think he hires and fires more of them than any of us realize.

I would like to present tonight a man who is well known to all of us here on the Coast. He is a graduate of Stanford, and he participated in the First World War. He is widely known in the securities business, having conducted the operations of his own firm for many years. Since 1925 he has been continuously associated with the Los Angeles Stock Exchange as either a member or an officer. He is recognized as an authority on Exchange administration and regulation and has been responsible for the Los Angeles Stock Exchange relations with governmental authorities and other exchanges since 1933. He holds many other important civic positions that I could mention here tonight, but I will just mention one or two. He is chairman of the National Better Business Bureau. He is one of the five paid presidents of stock exchanges in the country. I could go on at great length. We all know him as Mr. William G. Paul, president of the Los Angeles Stock Exchange, and familiarly as "Blondy." It is my great privilege at this time to introduce to you Mr. William G. Paul, president of the Los Angeles Stock Exchange. *(Applause)*

* * *

William G. Paul: Thank you, Walter. Retiring President Pierre and Incoming President Dick, and distinguished guests, and ladies and gentlemen. There are many in this audience tonight who have never seen me approach a podium with a prepared script. I dislike to. I usually like to talk off the cuff. But another president has had rather unfortunate experiences doing that recently. *(Laughter)* So with your permission, this being such a serious occasion, and momentous, I expect to stay fairly close to my script, although I don't promise to do so.

We Californians are delighted to have the Nation's security analysts as our guests, and I mean that most sincerely. We realize that for many years you have heard us express modest statements about our great area. In fact, your retiring President, Pierre Bretey, referred to our vocal reputation in his farewell address in San Francisco Monday night. Now his inference that you, with your characteristic conservatism, discounted our claims, was not news to us, because for years we have realized that, although the Nation's western border of economic stability is no longer deemed to be the Hudson River *(laughter)*, the area west of the Rocky Mountains is still somewhat suspect. *(Laughter)* So, we are glad you have come West, for now you can see for yourselves that our faith and confidence in our destiny stem from factors more tangible than mere optimism, pride, or hope.

It is in the same spirit that we in Los Angeles welcome you to southern California. As you may have heard or observed, there is a friendly but none-the-less strong rivalry between the northern and southern sections of our state. Last week we observed our second annual "Invest in America Week" in Los Angeles, and one of our principal speakers was from Georgia. And, like so many Southerners, he was very proud of his ancestors, and especially his paternal grandpappy. And he said one of the greatest regrets of his life, and also of his grandpappy's life, was that, when grandpappy had died, no publisher had yet been willing to accept his monumental manuscript which was entitled: "An Unbiased History of the Civil War from the Southern Viewpoint." *(Laughter)* Well now, tonight I want to talk to you just for a few moments, absolutely unbiased, about this northern and southern problem of California, from an unbiased southern viewpoint. *(Laughter)*

You know traditions play an important part in our lives, either personal or professional. But in time some traditions have become outmoded, and they exist thereafter as sentimental though not very practical concepts. Nevertheless, they exist, and I can use myself as a very apt illustration if you will pardon the personal reference.

It has already been mentioned that a good many years ago I was a pink-cheeked youth with a mass of blond hair. *(Laughter)*. During my undergraduate days at Stanford I had a dance band. That was a long time ago. It consisted of a piano, a banjo, and a drum, but it was a masterpiece, and it was augmented now and then with a cornet. In those days I acquired the nickname of "Blondy." It has stayed with me through the years, but, as you can see for yourselves, it is now purely traditional. *(Laughter)*

San Francisco is traditionally the financial and industrial center of the Pacific Coast. *(Applause)* In all seriousness, it is a deserved tradition, and it is one that historically dates back to the Gold Rush and the days of the '49-er. But the years have witnessed the growth of a second financial and industrial center in California that today surpasses San Francisco in many fields and seems destined to assume supremacy in most if not all the others in the not too distant future — and now I speak of Los Angeles. *(Applause)*

It is not my purpose to dwell on this subject any further. You are analysts. You deal in facts. You came to this Coast to obtain them at first-hand, and I have no question as to what your conclusion will be when you have weighed them. Furthermore, it is not my purpose, and I say this in all sincerity, to detract in any way from the traditional or actual stature of our sister city, that is, our sister city to the north. We are not really so much competitors as we are rivals, and we are both firmly united in our devotion to this great state of ours — California.

No, my desire is to urge you as analysts not to let the San Francisco tradition unduly influence you and those you counsel when you think of the West — our West. For almost twenty years, as you have been told, I have had the privilege of representing the Los Angeles Stock Exchange in its relations with other exchanges and segments of the securities industry, as well as Federal and state regulatory authorities. It has always been a matter of great concern to me that proper recognition of the importance of Los Angeles has been so long-delayed in materializing. One of our great hurdles has been to overcome the deeprooted impressions of San Francisco's supremacy that time and tradition have fostered. Happily, recent years have indicated a gratifying and an accelerating as well as widening trend toward the recognition that we believe Los Angeles and southern California deserve.

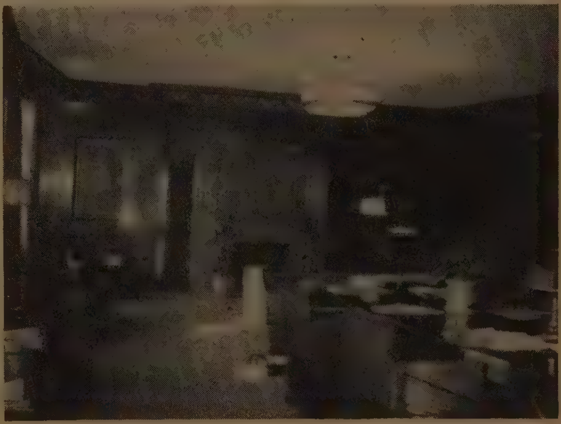
WELCOME TO LOS ANGELES

So we welcome you to Los Angeles. I am especially glad, because my two days with you in San Francisco worried me a little. Our friend in the North did a magnificent job of trying to sell you *(laughter and applause)* and, as you may have noted, I and we from the South were not exactly featured in their program. *(Laughter)* So I was afraid that we might find ourselves in the position of the defense counsel in a famous lawsuit in the early days of California. You know, in the early days of the West, judges were not necessarily legal-minded; in fact, the judge that I'm speaking about knew nothing of law and cared less — but he was the judge. There was a defendant in the court charged with stealing horses. That was a serious offense in the early days in this state in the West, and so the prosecutor got up and made a magnificent case and sat down. Then the judge immediately instructed the jury to bring in a verdict of guilty. Well, the defense counsel immediately arose and said: "Just a minute here, I would like permission to state my case." The judge pondered a moment, sent a stream of tobacco juice with unerring aim into the receptacle provided, and said, "Nope, I won't let you. In the first place, it won't do you any good; and, in the second place, you might unduly influence the jury." *(Laughter)*

Like that defense counsel, we didn't want your verdict on California to rest entirely on the presentation of the case that you had in San Francisco. *(Laughter)*. We wanted our day in court. Although, naturally, we wouldn't try to prejudice you even if we could.

Seriously though, we prepared kits. We put samples of them out in the Exchange floor today so you could see them. I can only assure you that those kits were not prepared in rebuttal of anything that you were presented with in San Francisco. Our kits were being prepared before theirs were, and I say that in all truthfulness. *(Laughter)* On the other hand, I also want you to know that we realize you had so much material handed to you you're probably weighted down; and, furthermore, if we gave you ours, you might throw it aside. So we are going to mail it to you at your offices. *(Laughter and applause)* So, any of you who saw those kits and thought you were being "jipped" — no — just open your mail, and for goodness sake, don't put these in the wastebasket. *(Laughter)*

I have to interject something here because a situation arose — which is certainly interesting to us as stockholders or, rather, as stock exchange members — between San Francisco and Los Angeles. Some thirty years ago the Los Angeles Stock Exchange was the largest stock exchange on the Pacific Coast. But we dealt in a lot of petty mining stocks and oil stocks, and so our volume was very much discounted by our friends to the North who were dealing in much more stable securities, or so they said. Through the years we appraised our relative standing in the dollar value of our transactions, and through the years that has been, more or less, the accepted standard, particularly since the advent of the SEC with the publication of its figures each month. It is very interesting to note



Lancaster Greene

Board room of the Los Angeles Stock Exchange

that, in the kit given you in San Francisco and in the kit you will receive from Los Angeles, we still compare our position with San Francisco in dollar volume, and that comparison is quite favorable to Los Angeles. But you will also notice that now San Francisco is dealing with, and I say this with all due respect, the Filipino Mining stocks that sell at nine and ten cents a share. The volume of those things can represent magnificent proportions, but the dollar volume doesn't amount to anything. Yet San Francisco, in its kit, claimed that it was 56% larger than Los Angeles, and don't you believe it. *(Laughter)*

I don't mean to offend, but, after all, you are analysts and you want the facts.

In all seriousness, your visit to the Pacific Coast cannot help but be mutually advantageous to this great area of ours, its industries, and yourselves. It has been a real privilege and a pleasure to have you here. We admit we talk a good game, and we hope you have discovered that we also play a good game, except in the Rose Bowl. *(Laughter)* We wish you a very pleasant journey home, and we sincerely hope you come again, and often. Above all, when your personal or professional thoughts or interests turn to California, we trust Los Angeles, as it should be, will always unfailingly as well as favorably be included in them. Thank you. *(Applause)*

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Chairman Podolak: Thank you, Blondy. The success of a National Convention depends on the time, effort, and co-operation of many. A list of those lending such assistance would be long indeed. I believe I express the feelings of all of us when I say that the forums, the field trips, receptions, and after-hour activities in San Francisco were certainly a brilliant success. I cannot say anything more except that I think San Francisco "outdid itself," if we can use a phrase that has been used many times. The speakers were certainly outstanding men. The many sponsors who gave financial assistance in both San Francisco and Los Angeles have our sincere gratitude. This convention would have suffered without the co-operation of the many companies who contributed the facilities and personnel for our field trips.

We have with us here tonight a number of honored guests representing the companies in southern California who have provided our field trip activities today. I would like to introduce these gentlemen to you. *(Introduction of dignitaries)*

We appreciate and thank you gentlemen and your companies for your hospitality and the wonderful opportunity to view your operations, and become more intimately acquainted with your companies and industries.

We persuaded someone you all know, to get off his flat car and be with us tonight. The one I refer to needs very little introduction since he is one of our best-known railroad analysts in the country. His activities during the last few years have been directed toward improving the standards of our profession. As a matter of fact, I would say the security analysts have finally attained real professional standing. We owe that, in no small measure, to men of his stature. The Special Train on which so many of you arrived was one of his engineered miracles. It should be called the "Bretey Special." It is a pleasure for me to introduce our retiring President who I hope will continue to lend his able assistance to us in the future — Mr. Pierre Bretey. *(Applause)*

* * *

Pierre R. Bretey: Mr. Chairman, Mr. Paul, members of the Los Angeles Society, and ladies and gentlemen. Speaking as a representative of an eastern Society, for the gavel of the presidency has passed on to the Pacific Coast — and I don't know if I should say this to San Francisco or Los Angeles, but I will leave it to Mr. Paul and those of your own group here to decide whether it's a worthy place to be located — we don't want to be in the middle of that scrap. *(Laughter)* I just want to thank both Societies, however, for their extraordinary efforts in making our stay on the Coast so momentous. In a city primarily known as a motion picture city, I think both cities are entitled to a gold Oscar.

(Whereupon Mr. Bretey discussed the train trip coming West, mentioning the places they had visited and the persons responsible for making the trip as successful as it turned out. Mr. Bretey also went into the details of the various trips to be made in southern California by the Federation and went into further detail concerning the return trip to the Gulf South and East.)

Mr. Bretey: I just want to conclude by saying thank you — thank you for your co-operation — and thank you, San Francisco and Los Angeles. We in the East are deeply appreciative. *(Applause)*

* * *

Chairman Podolak: Thank you, Pierre. We are going to miss you as the head of our Federation, but I'm sure that you will be with us in spirit.

In our Federation of Societies, as you know, the Convention is usually held in the home city of the executive vice-president of the Federation. The development and planning of our National Convention is no small task. Our executive vice-president of recent date, of course, fell heir to the job this year. I think it no exaggeration to say that the San Francisco activities were outstanding this year. The forums were excellent, timely, and informative. The speakers were well-qualified and outstanding leaders in their fields. It seems particularly appropriate at this time to pay tribute to all of his staff for the successful completion of what will be remembered as an excellent week of activities. Particularly appropriate at this time would be to commend the man who pulled all the strings that made this show click. You all know the one I refer to — he was our executive vice-president and has now been elected to the presidency of our Federation. He is an analyst of outstanding reputation. It is my sincere pleasure to present to your our new President-elect of the Federation, Richard Lambourne of San Francisco. *(Applause)*

* * *

Richard W. Lambourne: Thank you, Mr. Chairman. Honored guests, ladies and gentlemen, about halfway through Mr. Paul's speech I thought that the San Francisco contingent should just repair to the nearest exit! *(Laughter)*

In view of the long speeches that many of you heard in San Francisco, I propose to make this very short. *(Applause)* We owe a great debt of gratitude to the Los Angeles Society for this closing dinner to the Fifth Annual Convention and to all of those who made it possible, and also for the splendid field trips and wonderful Stock Exchange reception that we enjoyed today.

I think that what Los Angeles has done today and what has been planned for us for tomorrow will make it very hard for Sam Jones in Philadelphia next year. I feel very sorry for Sam. *(Laughter)*

There's nothing much more that I want to say, except this — that we in the San Francisco Society are very proud today of our fellow analysts in the "City of the Angels"—Los Angeles. Thank you very much. *(Applause)*

* * *

Chairman Podolak: Thank you, Dick. We share the same feelings, and I am sure that everything that has been said tonight about San Francisco has really been said in jest — so stay with us and don't go out that door!

It is now my great pleasure at this time to introduce one of our speakers for tonight, from a very famous company that you all know. It seems appropriate that we cover this field in Los Angeles because it is the home city of the aircraft industry, I think, in this country. He is an officer of one of the top aircraft companies, and he has been associated with the company almost from its inception. He has been in the financial department of the Douglas Aircraft Company for many, many years. As a matter of fact, back in 1921, I believe Mr. Strangman joined the Douglas Aircraft Company, becoming associated with Donald Douglas in the financial matters of the corporation — and he has been with him ever since, finally becoming treasurer of that great corporation. He holds many honors and other important outside duties. It is now my distinct pleasure to introduce to you a representative of that great company, Mr. Harry W. Strangman, treasurer of the Douglas Aircraft Corporation. *(Applause)*

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Harry W. Strangman: Thank you. Mr. Chairman, members of the Society, and ladies and gentlemen, this evening I shall attempt to cover briefly some of the problems that confront management in the aircraft industry during a period of so-called "cold war."

As a matter of definition, by "a period of cold war" I speak of a period during which the aircraft requirements of the armed services are subject to pressures and fluctuations more sudden and frequent than occur not only in so-called normal times but also in an all-out war.

During normal times the needs of the Navy and the Air Force are fairly constant but are largely constrained by the funds made available for research, development, and aircraft manufacture. The funds, being comparatively meager, do not permit of mass production. Contracts are in the order of scores of airplanes, and not the thousands that are required in an all-out war. The period between wars provides the time for research and development, and the change orders incorporating new developments are taken in stride.

In a time of all-out war, the aircraft industry is relieved of the uncertainties implicit in attempting to maintain a balance between civilian and military production. Production for civilian use practically stops, and everything yields to the military. Men, women, materials, and money become immediately available in practically unlimited quantities, and the job is comparatively easy. Models are practically frozen.

But in a cold war we are obliged to live, and operate, in a climate whose economic stability we can only partially control. We must accept the possibility — and the probability — of unpredictable expansion or contraction. We walk a tightrope. Yet, we can honestly say that uncertainty is anything but new. Since its very beginnings some fifty years ago, the aircraft industry has had the built-in characteristic of unpredictability.

We have much to offer in the way of inventive genius and managerial know-how, but sometimes it seems that these attributes are in great demand only when the bugle blows.

AIRCRAFT INDUSTRY

The infant aircraft industry expanded mightily to meet the demands of World War I, and then became very ill when contracts were abruptly terminated in 1918. All four of the then major producing companies were reorganized under bankruptcy laws. After a rugged recovery, the industry, confronted by World War II, perforce became the largest industry the world has ever known.

Between 1938 and 1943 floor space multiplied from 9.5 million square feet to 175 million square feet. Aircraft production, in air-frame pounds, soared from approximately 7 million pounds in 1938 to a very healthy 1.1 billion pounds in 1944.

Then the war ended, and we had a relapse. Floor space dropped to 41 million square feet, and air-frame production fell to 20.5 million pounds. Then came Korea and the call to expand our production facilities and raise our output rates to near-war levels. This industry has met and is meeting the challenge. For example, in their 1951 fiscal year 13 major air-frame and engine producers increased their volume from \$1.7 billion in 1950 to \$2.4 billion. Their backlog rose from \$5¾ billion at the end of 1950 to a little over \$10 billion in early 1952. In order to finance the current and prospective volumes, these 13 companies last year increased their short-term debt by \$191 million and long-term debt by \$7 million. On the balance sheet all these borrowings plus another \$30 million taken down from cash went into inventories — an increase of \$228 million in raw materials purchased and work in process. These violent changes pass for the "normal" economic climate of the industry, which is, to say the least, a bit precarious. It is never wise to plan a picnic too far in advance.

Today, we are further bemused by a demand for "guns, *and* airplanes, *and* butter." This is a condition that both the Government and the aircraft industry are struggling mightily to rectify, but the fact remains that, without enough materials and tools, it is impossible to produce everything at top speed.

Not only are available machine tools and certain strategic metals and alloys inadequate to supply all military needs, but also the Nation *is* committed to a policy of keeping our civilian economy healthy, at the same time that we are endeavoring to rebuild our air power. It is trying to achieve this balance — in superimposing rearmament on a full-blown civilian production — that contributes toward our present difficulties.

Chairman Carl Vinson of the House Armed Services Committee well summarizes our position when he says:

> Our aircraft industry is accelerating its output and doing a highly commendable job, even in the face of inevitable shortages which stem from the superimposing of rearmament upon a booming civilian production program. While a philosophy of guns and butter is, in my opinion, unsound, a philosophy of planes and butter is absurd. It troubles me to think that the delivery of a single jet fighter may be delayed because a part of its communication system has gone into a television set.
>
> Over 4,000 different sizes, shapes, and kinds of raw materials go into a modern jet fighter, and from these 4,000 varieties of raw materials are fashioned, for example, the 137,600 parts in a typical new patrol bomber.
>
> Each of these thousands of materials must be ordered against future requirements, must be checked, warehoused, drawn out of inventory, and spotted on production lines in one of the most complicated inventory operations in modern manufacturing.

Mr. Vinson well speaks the situation.

You all have read and pondered, I know, the pro's and con's of the "stretchout." This, another unpredicted influence on the climate in which we function, has given us considerable pause. In some respects, it is a matter of genuine concern that there should be a moment's delay in our defense effort. But the new program has certain advantages which were not inherent in the old program of rapid buildup and rapid letdown.

These advantages are two:

1. Extending high-level production rates over a longer time will insure that the Air Force and Naval air arm will continue to be supplied with the latest and most advanced combat aircraft, though the 126 combat wings of the Air Force and the Navy air arm may not be fully modernized until late 1955 or early 1956.
2. Inefficiencies and waste will be largely eliminated and costs to the taxpayers thus reduced — so much for the stretchout.

Now let us consider for a moment the capital needs of the present program. Without regard to the exact rate of production prescribed in this emergency, the problems of financing production are quite different from what they were in World War II. Then, with business largely on a cost-plus-fixed-fee basis, current collections comprised a larger proportion of sales and expenses incurred.

Advances from the Government were available in almost unlimited amounts, and for a year or so such advances were interest-free and later were charged at low rates. Thus the Government largely financed the industry in the hot war.

Currently, with a much larger proportion of the business on a fixed-price basis, advance payments are rare (I know of only one made to date), and progress payments are limited to a percentage of costs incurred, thus requiring the contractor of fixed-price business to wait for deliveries in order to receive his profits, if any, and making it necessary for him to invest much more capital in materials, work-in-process and receivables; thus the manufacturer must provide most of his own financing during the cold war.

With but three exceptions, all of the major aircraft and engine producers by the end of 1951 had found it necessary to borrow from the banks in order to finance their expanded production rates.

As mentioned earlier, 13 of these companies increased their short-term borrowings by $191 million and long-term debt by $7 million in their 1951 fiscal years. Most of this was done by straight short-term bank loans or revolving credit agreements or by V loans.

It is not yet clear how much more money it will be necessary for the industry to raise in order to meet the maximum production schedules. It is known that for some and perhaps most of the companies borrowings have increased substantially during 1952, but the stretchout will result in reduced maximum requirements.

MARSHALL SHIELD PLAN

The "Marshall shield" plan proposed that the Government provide, at its own expense, large facilities for the production of tanks, guns, aircraft, and other instruments of war. This plan would leave considerably smaller amounts of facilities to be built by the contractors under certificates of necessity. But the contractors' problem of financing these facilities is much more acute currently than it was in the last war.

In World War II, when business was largely on a CPFF basis, the contractor obtained certificates of necessity covering 100% of facility costs. These costs could be fully depreciated for tax purposes over a 60-month period, and, if the war ended before the 60 months were up, the remaining depreciation could be "ballooned" and respread over earlier months.

Currently, CPFF business is a much smaller proportion of the total. Certificates of necessity cover less than 100% of the facility costs — about 65% seems to be the average for the aircraft industry — and there is no provision for "ballooning" of the unused portion, if the emergency ends before the 60-month period is over.

Many of these new facilities are single-purpose, suitable for the production only of a particular type of product. Others may be additions to and expansion of general-purpose facilities, but, when the emergency is over and Armed Forces procurement reverts to a replacement basis, the contractor may find himself burdened with an even greater undepreciated excess capacity than he had at the end of World War II. He may find that he has millions of dollars frozen in these undepreciated emergency facilities.

Another major problem is that of securing capable and financially responsible subcontractors. Although the industry has spread its orders over a great number of suppliers and subcontractors — nearly 61,000 business firms were turning out parts, components, and material for the aircraft program in mid-1951 — considerably difficulty has been met in the subcontracting program. The Government philosophy of airplanes and butter and the terming of Korea a "police action" have made it more difficult to place subcontracts in some qualified areas. Those concerns who have already outlets for all their peace-type goods, produced at customary good profit margins, are understandably reluctant to cut back such production and replace it with the lower-margined defense items. As a rule they do not take kindly to Government renegotiation and/or redetermination provisions, and in many cases industry has to do a selling job to convince them it is to the best interest of the country to take the work.

Military production also seems to have been hampered somewhat by the mushrooming of new companies concerned with military production. Some of these are new subsidiaries of established companies. Others seem to have been set up independently in the hope of making large earnings with limited capital on war contracts. Many of the companies appear to be undercapitalized and so unable to guarantee performance on contracts.

Now a word about risks. The joint regulation, dated March 17, 1952, issued by the Army, Navy, and Air Force, states that:

> Care should also be taken to the extent practicable to avoid the placement of additional contracts or subcontracts in situations where additional contracts will overload the contractor's production capacity, overextend his financial resources and credit, and thus tend to interfere with timely performance of contracts on hand, and create need for additional contract financing arrangements, which may be impossible to establish on a prudent basis.
>
> However, in those cases of subcontracts, where the prospective borrower is financially weak in relation to the financial condition of his defense contract customer, and the interests of the government would be fostered by the making of progress payments to the subcontractor by his customer, it is appropriate that steps be taken . . . to arrange to the extent practicable for such progress payments to the subcontractor by his customer. By such means in appropriate cases, the guaranteed loan may become unnecessary, or necessary in lesser amount, and the risks of loss are borne wholly or in part by the prime contractor or subcontractor responsible for selection of the prospective borrower as his subcontractor.

Thus, the "guns and butter" program has multiplied the problems of subcontracting. The potentially good subcontractors with the know-how and adequate finances hesitate to take on low-margin business when there is continued good demand for their usual products.

The small subcontractor may need financing and can get it through progress payments from the prime contractor, but the latter is required to assume the risk of loss and isn't happy about that feature. All of which often leaves the prime contractor — the airplane manufacturer — in the position of a housewife who is preparing a meal, had the meat all done, and is waiting for some one else to start cooking the vegetables.

It has not been my intention this evening to radiate unmitigated gloom. I have found it a very salutary experience to summarize the problems implicit in our "cold war" operation, and, after examining the summary, I am quite sure that everything is not really going to hell in a hod. Difficulties, yes. But — and here I speak from the experiences of our own company — we have thus far met nothing insurmountable.

Though we cannot safely use the present as a yardstick for the future and should remember that many factors beyond our control can, and probably will, change some existing conditions and reasonable expectations, the experience and ingenuity of the industry will enable us to weather the disclocations induced by a "police action." The answer to our problems, of course, lies in alert and progressive yet conservative management.

* * *

Chairman Podolak: Thank you, Mr. Strangman. It's a good thing we don't have an alphabet, or your problems would certainly be multiplied.

It would have been unfortunate indeed if during this Convention we failed to have a spokesman from one of the great industries of the country — and, of course, one for which southern California is particularly noted—the motion picture industry. Difference of opinion over the past few years has been rampant among astute men of our profession concerning the outlook for this industry, in view of the birth of that robust youngster, electronics, and the television industry.

For that reason we thought it would be immensely interesting and educational to hear from one of the outstanding leaders in motion pictures — one who, by experience, is perhaps more qualified to discuss this subject than anyone we know. Some of the things I am going to tell you about the next speaker will probably surprise him. I have done a little private research of my own on the side. He is a Southerner by birth, having been born in Greenville, Ga., and his father was a very successful merchant and cotton farmer.

I understand he graduated from Georgia Tech as an electrical engineer and that, before he left school, one of his professors told him that he would certify his degree for electrical engineering if he would promise never to practice electrical engineering. *(Laughter)* Not more than one month later, probably in an attempt to prove how wrong this professor was, he purchased the telephone company at Ocilla, Ga., a town of 2,500. He successfully operated this business, and in 1912 sold the company.

In 1914 he became associated with S. A. Lynch of Atlanta in the development and operation of a theater chain. In 1922 Paramount Pictures bought their interests and forbade Mr. Freeman from entering into any theater operations. In 1933 he was asked to come back and operate the Paramount Theater chain which was in bankruptcy at that time. The trustees had so appointed him, and, when Paramount came out of bankruptcy in 1935, he became vice-president and director. In 1938 his success was, as usual, the same as it was in the theater chain early in its inception, and he was placed in charge of production, which post he has successfully held ever since.

He has held many important civic offices, and I couldn't begin to tell you how many they are. It might be of interest to you to know that he was a director for seven years of the Federal Reserve Bank of San Francisco and chairman of the board for five years. He has been president and is now chairman of the Motion Picture Producers Association. It is my great privilege to introduce to you Mr. Y. Frank Freeman, vice-president in charge of production of Paramount Pictures on the Coast. *(Applause)*

* * *

Y. Frank Freeman: Thank you, Mr. Podolak. Ladies and gentlemen, I'm from Georgia, as he told you, and, if my Georgia dialect mixes you up in any way, please understand it is not premeditated. But in order that you can understand the subject matter I will discuss tonight, I think I can best lay my foundation by reading to you the portions of a sermon from a good old Georgia Negro preacher, and you must understand that in Georgia, even though they may not be able to read, they do understand the Bible. They may sometimes get mixed-up a little bit in the presentation of the facts, but nevertheless the facts are all there. This is the motif of the sermon given by the preacher to his flock:

> And lo, de queen of Sheba, she went down into Jerusalem a sittin' on a mule. And behole, de mule flung her, and she fell among thieves, but dey passed by on de udder side. Bye and bye she seed dem a comin' from afar off, and five of dem was wise and five was foolish, and dey come forth to meet her wid palm leaf fans, cryin' Great is Susaneth of de Ephesians. And dey waved der palm leaf fans in de mule's face. And she rode down de street and she looked up into de second story window and cried out, Fling down Jezebel. And de answer come back, We ain't gwine ter fling down Jezebel. And she said unto them a second time, Fling down Jezebel. And de answer came back again, We ain't gwine ter fling down Jezebel. And she cried out unto dem yit a third time, Fling down Jezebel, and den dey changed deir minds and flung down seventy times seven, and busted her in little pieces which could not be numbered, and fed de multitude. And dere was great weepin' and wailin' and snatchin' out of teeth, and dey picked up her fragments and filled twelve baskets full, and five loaves and two fishes was left over. And I said unto you brethren, on de dey of judgment, whose wife is Jezebel gwine ter be. *(Laughter and applause)*.

That's somewhat our problem. *(Laughter)* We have on our side long years of experience, and we are pretty persuasive in maintaining our position. Ron Regan has said of me that I was the only man that has ever convinced him that Sherman's march through Georgia was a masterful retreat. *(Laughter)*

The motion picture industry is broken up into three important branches:

1. The production of motion pictures.
2. The distribution of those pictures into the sources from which revenue is received.
3. The sources from which the revenue is received—the theater.

The theater is as old as history, and it will be with us as far in the future as it is possible for anyone to foresee. The theater within its own operations changes. The theater in which you might be amused in the future, or entertained, might and possibly could be your home. In that field you have the possibility of motion pictures being televised into the home. However, there are many problems ahead for that facet of our business, and it would take me a long time to enumerate them all. Technically they have not been solved. To say that they will not be, I think, would be a fallacy; they will be solved sometime.

There are several experimental systems today of televising the motion picture into your home. As the years go by, technological development will take place and some of the problems will be overcome. It is not possible yet to televise without bringing a scrambled picture into your home. There are those that say, "Whatever can be scrambled can be unscrambled."

MOTION PICTURES FOR HOME

There is a possibility of televising motion pictures into your home by wire communications without the necessity of a central board—that is very expensive and has many attendant problems. The use of the air over which to televise a scrambled picture, where only certain people can receive it, is still a problem to be solved.

As I say, we can go on into that area, but, when we finish, the motion picture is still the greatest medium of entertainment that has yet been found. The motion picture that is made right here in Hollywood reaches a degree and a height of perfection in entertainment that has not yet been attained in the field of television as television is presently used.

Our present association with the theater is close because it is financially to our advantage to continue serving the motion picture theater. Revenue from television as it is known today is not sufficient to pay for the cost of an important motion picture. .

The question will be asked by many of you, "Are you going to make television films?" Yes, television films are going to be made. "When are you going to make them?" They are being made today by many independent producers; they will be made by major studios whenever revenue is of sufficient size to warrant them. More stations using them make it possible for such films to return their investment.

It is my opinion that the motion picture theater will be here for your grandchildren and your great grandchildren to attend. Fewer in number, yes, but improved in quality, improved in ability to render entertainment to you. And I think we will be able to compete with any form of entertainment that is offered.

THE TWO MEDIUMS WILL LIVE

I say again that the two mediums still will live and go on — the public theater and the home theater, because all of us still like to assemble. There are certain pictures that may never be feasible for home viewing because of the cost. We hear estimates of an audience of about 40 million television sets — it will reach that size, and many more — and we hear of a dollar admission for that set in the home. It probably will amount to that, but we have to consider the number of people present for that dollar. The cost of collecting and handling that dollar and how much is left of that dollar for the producer of that motion picture are fantastic.

Under our present system of operation, we receive, in Hollywood, 35 cents out of each dollar collected throughout the world for our films. The other 65 per cent is collected from you, as patrons, and is used in the operation of the theater, the rent that the theater has to pay, payrolls, advertising, and whatever amount is left represents the profit. We do not have any part of the popcorn, peanut, or candy business which is a most important part of the operation of any theater today.

A good motion picture, an outstanding motion picture, does more business today than at any previous time in the history of the motion picture industry. That is on a worldwide basis. I refer to Paramount Pictures only because the facts about Paramount Pictures are in my possession, whereas the facts about other companies are not always in my possession.

I think *Gone with the Wind* is known to have been the greatest revenue-producing picture ever made. It grossed approximately $30 million throughout the world. *Samson and Delilah* made by Mr. DeMille will gross $17½ million throughout the world. *The Greatest Show on Earth* will gross between $22 and $25 million throughout the world. *Samson and Delilah* cost $3 million; *The Greatest Show on Earth* cost $4 million. The possibilities today are excellent for a great motion picture. I could mention *Quo Vadis* made by Metro-Goldwyn-Mayer, *Caruso* and *Song of My Heart* produced by Twentieth Century-Fox, and many others. People will go to see those pictures, not only in America, but from one end of the world to another. The only place today where the American motion picture is not seen is behind the Iron Curtain, and there they steal those scenes in our pictures that are not good and show them. I do not believe we show any pictures at the North Pole or the South Pole.

WILL CONTINUE TO SOLVE PROBLEMS

The motion picture industry will continue to solve, by ingenuity, the problems that confront it today. We are faced with rising costs of production and sales, and, insofar as America is concerned, a decreasing box office return over-all. Great motion pictures are the exception.

I think you will find that fewer pictures will be made. People no longer go to the theater simply because a motion picture is being shown. They are selective. I believe the two mediums, television and motion pictures, will develop together. One will take whatever the other has to offer, and they will develop together. There is no reason why they shouldn't. Television offers us many advantages—and we offer television many advantages. I think, and I feel, that we are at the beginning of a new period in the life of the motion picture.

In conclusion, not having time to tell the whole story of the motion picture industry, I will conclude with another Georgia story—a little off-color, but not too much. This story is for all of you who have any question in your mind about the future of motion pictures.

This is about a good old Georgia Negro who had a pretty large family and was pretty indolent and lazy. He was on relief, and he was told that, if his family continued to increase, there wouldn't be any increased relief granted him. But, nevertheless, the family continued to increase. So Miss Janie, who worked on the relief program, went to see Moses and said, "Moses, if this happens again, and if you have another child, we're just not going to give you any additional relief for that child. You've got 14 in the family now, and that's enough." "Well," said Moses, "I agree with you, and I promise you it won't happen again."

Well, another year went by and sure enough he had another child, and again Miss Janie went to see Moses and told him that, if he had another child, he would absolutely not receive any additional relief. "Well," said Moses, "I promise you, if it happens again, it will either be me or the child—you won't have to have an additional amount to give us. If it happens again, I'll get a rope and hang myself." Well, the same thing happened again and Miss Janie went to visit Moses and said, "Moses, didn't we have an agreement?" "Yes," said Moses, "and I want to tell you what happened. I went out there, and I got me a rope, and I put it on that tree and got it all tight around my neck, and I started to pull it, and, the tighter I pulled it, the more I could hear the Lord start talking to me, and he said, 'Moses, don't do it now — you're hanging the wrong man.'" *(Laughter)*

The rope may be a little tight now, but we are not hung yet. Thank you very much. It's been a pleasure to be here with you this evening. *(Applause)*

* * *

Chairman Podolak: Thank you, Mr. Freeman. I suppose Dick Lambourne and his staff have looked forward to the completion of this affair with eagerness, just like architects whose real satisfaction comes upon the completion of the building. However, I am sure that they join with us now in some feeling of regret that this week's activities are over—regret that we must leave so many of you fine people we have enjoyed meeting and exchanging views with. I'm sure that we on the Coast have obtained real value from the week's activities, and we certainly hope that all of you have also.

Again our compliments to those who have done so much toward making this Convention a success. We hope that the new officers of the Federation will continue the brilliant work that has been done to this point in raising the standards and recognition of our profession—I'm sure they will.

If there are any of you who have been left out of worthy mention tonight, it has not been an oversight—but rather that, where there have been so many contributing to this activity, it's hard to mention all of them.

AN UNUSUAL YEAR

This is an unusual year, and I think it is entirely fitting to leave you with a final thought before closing. I'm sure that you all, as analysts, have looked at the balance sheet of "U. S. of America, Inc." You have seen the income statements, the expenses, the assets and liabilities. If you have perused them, you will find there's a lot to be asked for in those budgetary figures in the balance sheet of America, in the activities of the present guiding forces in Washington. I think that it would be fitting at this time, although this is not a political meeting, to say to you to look at those things carefully—look at the quality of the management and their adherence to what we might call the by-laws of their corporation, and let your conscience be your guide this year.

I am not going to tell you what to do, but, as Mr. Russell has said—Mr. Russell owns the ranch that the Richfield Oil properties are now located on—"I don't care who you vote for as long as you vote for a Republican." *(Laughter)* In any event, we are certainly pleased to have had you all here tonight, and it is with regret that we say good night to you all. *(Applause)*

The Special Train

PIERRE R. BRETEY
Retiring President
of the Federation

Jean Raeburn, N. Y.

PIERRE BRETEY'S TRAIN TRIP to the Conventian held in California has come—and gone—but its memories linger. Of great and immeasurable consequence are the results of this journey from East to West, for it has brought the Financial Analyst into prominence. Henceforth he will have undisputed professional recognition.

Those who shared the privilege of being part of this immense undertaking have expressed deep gratitude to Pierre and his competent committee. The committee, consisting of Kennard Woodworth, Truslow Hyde, Donald Macurda, and the ever-efficient and untiring Richard Lambourne, contributed lavishly of time and energy. Theirs was a stupendous undertaking, performed in an unforgettable manner. Without thought of self-aggrandizement or fatigue they made preparations and toiled. They became a bulwark of strength to Pierre toward the advancement of his project.

Because the arrangements did not miss in a single detail it became possible for security analysts to see the operations of large corporations and manufacturing plants en route to California and return. The Special Train took them through the most productive sections of the South and Southwest. The Pacific Northwest too was added to the itinerary. California, always hospitable, "opened its doors" wide; analysts were invited to inspect her old and new industries.

Members who shared in the actual adventure brought eye-witness reports to members unable to attend. So that each and every one might profit by what was seen, they described and explained the particulars of industrial processes from the stockholder point of view. Texts and photographs illustrate reports. It was a glorious adventure, a magnificent fulfillment of Pierre Bretey's idea. This unusual seeking for knowledge by way of visiting industry has focused attention on the analysts and brought them widespread acclaim. Those of today and tomorrow will be benefited. For this reason members of the National Federation of Financial Analysts Societies offer Pierre their thanks.

H. S.

Lancaster Greene

Convention Tour of Industry

LANCASTER M. GREENE

TWO HUNDRED SENIOR ANALYSTS, fifty accompanied by their wives, boarded the Special Train of the National Federation of Financial Analysts for the 1952 Convention in San Francisco and Los Angeles. They assembled from New York, Boston, Providence, Philadelphia, Chicago, St. Louis, Richmond, and other financial centers to participate in the first analysts' National Convention outside New York City. They were making history.

CHICAGO & WESTERN INDIANA

At Chicago, their first stop, the analysts toured that city's industry as guests of the Chicago & Western Indiana Railroad. From this belt railroad, accompanied by many rail executives, they inspected the electromotive division of General Motors as guests of Nelson Dezendorf, vice-president, who conducted a lively luncheon forum at McCook, Illinois.

TRIP OVER PIKE'S PEAK

Harry C. Murphy, president of the Burlington, accompanied the Financial Analysts Special which brought analysts from Chicago to Denver. Forty analysts collected at Continental Airlines, Denver, on May 1, for luncheon at the airport and an exciting trip over the snowcapped Pike's Peak, the Broadmoor at Colorado Springs, the Golden Cycle mill, the Colorado Will Rogers Memorial, Red Rock Theater, and large samples of Rocky Mountains covered with snow and ice.

The utilities group lunched with Public Service of Colorado and then went on an inspection trip while the rail group were guests of Wilson D. McCarthy, president of the Denver, Rio Grande Railroad. With A. E. (Al) Perlman, executive vice-president of this road, the F. A. Special went to Salt Lake City, detouring over Union Pacific Railroad tracks because of a rockslide on the Denver. The Denver, Rio Grande paid $1,580 trackage rental on the shortest route to assure that the analysts arrived on schedule at Salt Lake City.

Lancaster Greene

George Gadsbv, president of Utah Power & Light, proudly shows his new two-million-dollar generator to visiting analysts

There George Gadsby, president of Utah Power & Light, escorted our members through the new Gadsby Power Plant and later through Salt Lake City itself. It is a tour of which the entire United States may be proud. Beauty abounds, and there are no slums. The Mormons must "have something" was oft repeated. The steel strike prevented a trip through the Geneva plant, but the Bingham mine of Kennecott Copper provided plenty of thrills. The company set off 42 blasts in this great open-pit mine for photographers to find chance after chance to snap active copper mining. Sunset from the roof diningroom of the Hotel Utah was magnificent with street lights below seeming to run straight out to the horizon of the Rocky Mountains, where the sun was sinking in all its splendor.

WESTERN PACIFIC WAS HOST

John Munson, executive vice-president of the Western Pacific, and Roy E. Larsen, treasurer of the road, were hosts to the F. A. Special from Salt Lake City to San Francisco, seeing that the analysts enjoyed the excellent food and service that had been afforded by the Burlington & Denver Roads. Fred Whitman of the Western Pacific arranged a visit to the Feather River Canyon. The group took buses to see a lumber mill and to gaze on the wonders of the gorges. In the canyon they visited the Cresta Power Plant of the Pacific Gas & Electric Corporation.

Movie cameras, Polaroids, and many others from the Graflex down to the tiny Minox, were busy capturing

The Bingham mine of Kennecott Copper in Utah was visited by analysts

evidences of the excitement of analysts wandering in new places and meeting the managements of the great corporations. They showed the analysts their latest wonders and acted as hosts at luncheons, dinners, and cocktail parties. These executives discussed earning prospects of their respective properties. Questions were invited and answered.

TRIP TO MONTEREY

When the group arrived at Oakland, buses took them to the Claremont Hotel, at Berkeley for breakfast and then 135 miles down to Monterey and the unique beauties of the 17-mile drive, with its shore blanketed with flowers, its tortured rocks drenched in sunlight and surf spray, and the cypresses gnarled and twisted in fascinating shapes. Visiting the Semper Virens big trees, analysts seemed impressed with the manner in which these redwood giants survive the ravages of centuries of fire and weather.

After arrival at the Fairmont Hotel, Convention headquarters, the business meeting of the National Federation directors followed a cocktail party at the Top of the Mark. Richard W. Lambourne of Dodge & Cox, San Francisco, was elected President. Samuel B. Jones of the Fire Association of Philadelphia was elected executive vice-president. By precedent he will become President next year. Kennard Woodworth of Eaton & Howard, Boston, was re-elected treasurer.

1953 CONVENTION IN PHILADELPHIA

The directors voted to hold the 1953 Convention in Philadelphia on April 15. There was a long discussion on the Constitution, and it was decided not to admit to the Federation small groups lacking background and history.

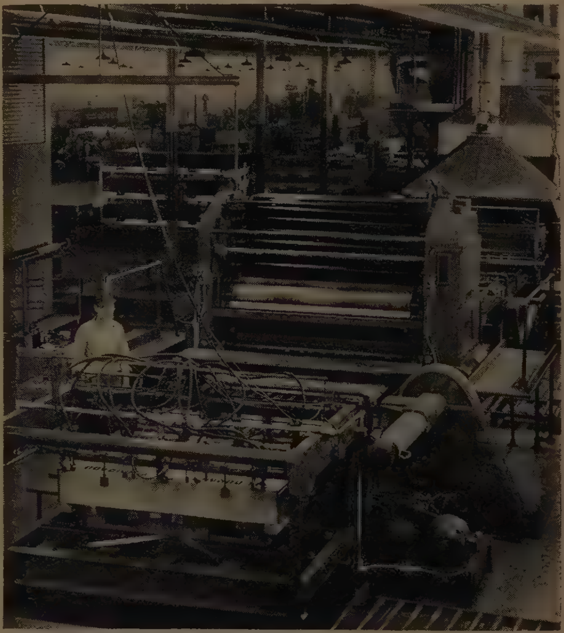
The following morning the forum conferences of the Convention started. These are covered completely elsewhere in this issue. Reporters called these meetings the most important financial conference ever held in San Francisco. That afternoon Dean Witter & Company gave a reception at the Fairmont honoring G. Keith Funston, president of the New York Stock Exchange, and the National Federation of Financial Analysts Societies.

At the annual dinner that evening Pierre R. Bretey of Baker, Weeks & Harden, New York, gave the annual message of the retiring President. Mr. Bretey was given a plaque by Richard W. Lambourne for his service to the Federation. Mr. Lambourne called Helen Slade to the speaker's table to receive from the San Francisco and Los Angeles analysts a jeweled pin for her voluntary service. A report of the annual dinner appears elsewhere in the PROCEEDINGS.

RECEPTION AT STOCK EXCHANGE

The San Francisco part of the Convention closed with a reception at the San Francisco Stock Exchange, a gay party, which left the evening free for rides on the cable cars or visiting Chinatown or Fisherman's Wharf.

The research tour continued May 7 with some analysts



Lithographing 55-gallon steel drum body sheets on the world's largest metal decorating press, Rheem Manufacturing Company, Richmond, California taking a bus trip to the Standard Oil of California refineries and petrochemical plants, one group touring the harbor as guests of Pacific Gas & Electric Corporation, a group visiting Pacific Telephone & Telegraph facilities and the metal container plant of Rheems Manufacturing, another visiting the vineyards of Napa Valley, and a fifth group going to Santa Clara County, first inspecting the Owens-Corning Fiberglas plant, where they saw the most mechanized glass-making plant in the country, a fully automatic pushbutton plant, eliminating the danger of silicosis to the employees. Mr. Louis R. Kessler, vice-president, said that sales of Fiberglas in the first year, 1939, were $4 million versus $97 million in 1951, and higher sales were forecast for 1952.

OWENS-CORNING FIBERGLAS

Next the analysts on this tour lunched in San Jose as guests of Owens-Corning Fiberglas, Food Machinery, and International Minerals & Chemicals. Then the group visited Food Machinery, where they saw continuous cookers, automatic canning, a walnut harvester, sprayers, fire-fighting equipment, and saw personnel carriers for the Armed Forces driven into water tanks to test them for water tightness.

ACCENT PLANT

The final inspection of the day was at the Accent plant of International Minerals & Chemicals, where research and manufacture of amino acids is centered. The group saw beet sugar waste converted into monosodium glutamate (Accent), and Mr. Freeman told analysts that Mr. J. R. T. Bishop, vice-president, would send each a set of shakers for the kitchen, salt and pepper and—emphasizing the third shaker theme of this company—a shaker full of Accent.

After the bus trip home analysts had an evening unplanned and thus available for seeking out the unusual spots in San Francisco.

CUYAMA VALLEY

Sixty members took off in three D-C 3's the morning of May 8 for Cuyama Valley as guests of the Richfield Oil Company, looking over the Wheeler Ridge field from the air and inspecting the Cuyama oil fields and refinery by bus. The town of Cuyama has been built for Richfield employees, with attractive prefabricated, air-conditioned homes, and a fine motel with a swimming pool, beside which the group lunched and held a forum with Rollin Eckie, chief geologist, Frank Morgan and Mr. Chamberlain.

Richfield Oil flew the analysts into the airport at Los Angeles at 5 o'clock so they could spend the night at the Ambassador and meet the next morning at Glendale station with the groups who had been guests of United Airlines on a flight over northern California and those who had visited Kaiser Aluminum & Chemical Company and Permanente Cement Company near San Francisco.

LOCKHEED AIRCRAFT

From here one group inspected the Lockheed Aircraft plants at Burbank and then Columbia Broadcasting Studio, another went to North American Aviation, and later Douglas Aircraft Company, while others inspected the Fontana plant of Kaiser Steel Corporation or visited Southern California Edison, or took a rail tour of the industries of the area.

PACIFIC NORTHWEST

One group of 40 left San Francisco May 9 to visit forestry projects, paper plants, and hydroelectric plants of the Pacific Northwest by plane.

The Los Angeles Stock Exchange gave a reception for the analysts on the Special Train, followed by the closing dinner with the Los Angeles Society as host. An account of the closing dinner appears with the forum sessions.

On May 10 a group entrained for San Diego as guests of the San Diego Gas & Electric Company and Consolidated Vultee, visiting the power company and also seeing the B-36 plant and going through some of these giants of the air. Other members visited movie sets, while still others took the day off for swimming, tennis, or sightseeing on their own.

SOUTHERN ROUTE

Sunday the 11th the Financial Analysts Special Train continued the journey over Southern Pacific, which had taken charge of the train from San Francisco. The Southern Pacific took the train through Palm Springs, Yuma, and Tucson, across the plains to El Paso, to Houston, and turned the train over to another line at New Orleans.

SCENIC DRIVE

At El Paso buses took the members up over the Scenic Drive overlooking the city and thence to Juarez for a look at old Mexico. The buses stopped on the Main Street to allow the group to shop and haggle for Mexican bargains.

TEXAS GREAT DISTANCES

Texas impressed analysts with its great distances. It was a day's rail journey from El Paso to Houston. Here the Chamber of Commerce invited the group to go by launch through the ship canal to the San Jacinto Battleground, where Texas won independence from Mexico. From here

U.S. INDUSTRIAL CHEMICALS CO.
DIVISION OF NATIONAL DISTILLERS PRODUCTS CORPORATION

The plant of U. S. Industrial Chemicals Company, division of National Distillers Products Corporation, was a stopping point on the western tour

Analysts being conducted through the Texas division of the Dow Chemical Company in Freeport, Texas

the industrial analysts took buses to the Baytown Refinery of Humble Oil, which is even larger than the Esso Refinery at Baton Rouge. Due to Humble labor policies, this was one of the few refineries in the Nation that were not on strike on May 13.

Returning to Houston, the group were guests at dinner at the River Oaks Country Club. This party was given by the Tennessee Gas Transmission Company.

MONSANTO CHEMICAL

On May 14 buses drove the members to Texas City, to the site of the 1947 explosion, where Monsanto Chemical is adding to its plants. Thence they drove to Union Carbide & Carbon Corporation, observing the making of Prestone antifreeze, and the site of a new plant to make polyethylene, the material used for squeeze bottles.

DOW CHEMICAL

Dow Chemical Company was host at a barbecue luncheon. Dr. A. P. Beutel, vice-president and manager of the Texas division of Dow, then showed analysts through the 7,000-acre chemical empire at Freeport, Texas, where Dow plans a great expansion and now makes about 60 big basic, volume items such as chlorine, caustic soda, glycols, vinyl chloride, chlorinated hydrocarbons, magnesium from sea water, and stryrene. From Dow the group drove 80 miles to Houston and the Hotel Shamrock, where Monsanto Chemical was host at an outdoor dinner by the great swimming pool, where analysts were entertained with an aquacade.

From Houston the Southern Pacific brought the F. A. Special overnight to New Orleans, where rail analysts took a trip over the Belt Line Railroad, observing many plants and taking a launch through the harbor.

Three D-C 3's and a Grumman Mallard loaded the utility, industry, and oil men for a trip 100 miles to New Iberia, thence 55 miles by bus to the Gulf of Mexico, where nine launches sped the group 15 miles off shore to Pure Oil drilling platforms which are supplying United Gas Corporation, our hosts, with natural gas. The boats had to stay in a channel because the water is only three feet deep over much of this part of the Gulf. After this rugged day of travel analysts had a keen appreciation of the efforts demanded of oil and gas men by the U. S. consumer. One group of analysts took a trip to Baton Rouge to see the great Esso refinery.

KAISER ALUMINUM

Industrial members visited Kaiser Aluminum & Chemical Corporation at the new Chalmette plant, which is being expanded to a 400,000-ton plant. Analysts were surprised to find aluminum is heavy enough to be drawn molten from the bottom of the furnaces whereas magnesium is dipped from the top because of its relative lightness. The Celotex plant was on strike and the visit canceled, but Celotex entertained the group at the New Orleans Country Club.

After a reception at the Roosevelt given by the United Gas Corporation, members scattered to visit the French Quarter famed for its food and for its songs. Then members boarded their Financial Analysts Special on the Illinois

Central. All too soon the porters called and buzzed, "Time to get up for breakfast. We're in Natchez."

The International Paper Company gathered the men for an inspection trip of its new dissolving pulp mill, built for $43 million, and being doubled for $23 million more to help fill the demand for rayon for tire cord. Ike East, president of Southern Kraft, had come for the luncheon forum, and William A. Hanway had arrived from New York for this purpose. The ladies were guests of the Natchez Garden Club and made a pilgrimage of many beautiful ante-bellum homes not ordinarily open.

Sunday morning the 18th Wayne Johnston, president of the Illinois Central Railroad, boarded the train at breakfast to conduct a forum and later to demonstrate the way an automatic car classifier operates over a hump at the Markham Yards near Chicago. Here analysts found direct routes to their home cities. The great California Convention was history!

Analysis of Attendance

Fifth Annual Convention

The huge success of the Fifth Annual Convention is revealed in the following figures:

GEOGRAPHICAL BREAKDOWN OF REGISTRATIONS IN SAN FRANCISCO MAY 5 AND 6, 1952

Alabama	1
Arizona	1
California	317
Connecticut	1
Colorado	2
District of Columbia	1
Florida	2
Illinois	38
Iowa	1
Massachusetts	67
Michigan	9
Minnesota	5
Missouri	6
New Jersey	1
New York	119
Ohio	16
Oregon	7
Pennsylvania	39
Rhode Island	10
Utah	2
Virginia	11
Washington	6
Wisconsin	5
Canada	5
Total	672
Student registrations from Bay Area Universities	48
Grand Total	720

The foregoing total is exclusive of corporation speakers on the program (28) and other invited guests from the armed services, utility commissions, and so on (12), members of the press contingent (approximately 25), and individual registrations for separate program events such as forum conferences, luncheons, and annual dinner (65). Thus the total participation in the San Francisco program adds to approximately 850 *persons.*

A check on this figure is obtainable from Dean Witter & Company, the official host for the evening reception at the Fairmont on May 5, and the San Francisco Stock Exchange, whose elaborate reception took place at the close of the program on May 6. Both sources are inclined to believe that at least 900 people attended their wonderful cocktail parties.

However, the figure of 850 still excludes a very sizable number of corporation executives and plant officials who served as host participants in the eight *California field trips* originating in San Francisco. A conservative estimate would be at least 150. Then one should add in an estimate of the number of host executives, local dignitaries, bankers, and other guests participating in the great *Pacific Northwest trip* from May 9 through 16—probably not less than 350, counting attendance at luncheons and dinners in the various cities visited.

CONSERVATIVE TOTAL

All of which makes a conservative total of 1,350 different persons for the events recounted thus far. But what about *Los Angeles?* Southern California guests and hosts from the financial community at the splendid Los Angeles Stock Exchange reception on May 9 and the fine closing dinner that night may be estimated at not less than 300 (over and above those participants who had already registered for the Convention in San Francisco). As a rough but still conservative guess, the seven *field trips in Southern California* were attended by at least 150 corporation host officials and guides.

We arrive at a grand figure of 1,800 participants in just the West Coast events of the Convention. To be realistic, rather than conservative, call it 2,000.

But how about the *Special Train?* At this writing, precise figures are not available covering the "supernumerary" participation by company hosts, railroad officials, civic leaders, and other guests at luncheons, dinners, plant visits, receptions, and the like, in such cities as Chicago, Denver, Provo, Salt Lake City, Quincy ,(Calif.), Monterey, San Diego, El Paso, Houston, Baytown, Freeport, Galveston, New Orleans, Baton Rouge, Natchez, and other stopping points of the fabulous "Bretey" tour.

Let's just double the previous cumulative total as a fair country guess. That makes a grand total of 4,000 for the entire Convention activities. Those from New England and Philadelphia will probably stop at that in the interests of conservative statistics. If you are from the West or South, however, add a thousand-odd and everyone will be satisfied. In any event, it was "colossal."

Special Train Trips

PIERRE R. BRETEY

On their recent trip to the West Coast, small groups of National Federation members were the guests of Southern Pacific and of the Illinois Central Railroads on special trips for the inspection of both railroad and industrial facilities. The Southern Pacific was our host in San Francisco, Los Angeles, and Houston; Illinois Central our host, in conjunction with the New Orleans Belt Line, in New Orleans.

Our first tour was in the San Francisco Bay area under the guidance of Mr. Lafferty of the Southern Pacific and of Mr. Kearney, president of the Sacramento Northern, 100% owned subsidiary of the Western Pacific. The tour included stops to inspect both yards and industrial plants in Oakland, after which our group proceeded to Pittsburg, properly named, since it is the home of the largest steel assembly plant on the Pacific Coast, and came back via the important San Leandro industrial district, served exclusively by Southern Pacific, and the Dumbarton Bridge, thence returning to San Francisco. Our group was particularly impressed with the dominant position enjoyed by Southern Pacific in the Bay Area.

Several days later, our group was treated to one of the high lights of the entire trip. After leaving Glendale on specially equipped flat cars, a stop was made to inspect the humping and car retarder facilities in the recently completed Taylor yard. (Time did not permit the inspection of the road's Diesel facilities recently located in this yard.) Then the train proceeded through the downtown section, formerly the heart of industrial Los Angeles, and thence on to the newer industrial areas dominated by such plants as Firestone and General Motors; the latter corporation has two plants and turns out 40 cars an hour in each one. After traversing relatively sparsely settled areas, dominated by a series of oil fields, the group reached Wilmington, the harbor of Los Angeles.

Unlike the situation in San Francisco, where Southern Pacific occupied a position of such dominance, all three major railroads, Southern Pacific (including Pacific Electric, 100% owned subsidiary), Union Pacific, and the Santa Fe shared more or less equally in serving industry in the Los Angeles area.

On our flat car trip, the analysts were privileged in being accompanied by such top Southern Pacific officials as Messrs. Corbett, Peterson, and Peoples. All of these did not spare themselves in attempting to point out the relative position of all of the railroads as we continued our journey. Much credit is due Mr. McIntyre of the SX organization for arranging the details of this most interesting trip.

In Houston our group was again the guests of SX officials, this time under the leadership of Major Craft, executive vice-president of the Texas–New Orleans division. After an excellent luncheon at the San Jacinto Inn, where the entire party were the guests of all of the railroads serving the Houston area, our small group inspected the various freight yards of the several owning railroads of the Houston Belt. Subsequently a stop was made to inspect the freight house of the SX where special examination was made of a mechanical belt facilitating marked economies in the handling of the railroad's LCL traffic.

On this trip, special mention should be made of the unusual courtesies shown the group by Mr. Maxwell of the Fort Worth and Denver Railroad. SX occupies an unusually strong position in Houston, one not quite so dominant as Santa Fe but infinitely stronger than Los Angeles.

On our last railroad trip we were the guests of the New Orleans Belt Line. Flat cars and coach equipment were provided by the Illinois Central. A large number of railroad officials representing the L & N, SR, GFO, SX, TP, IC, L & A, and the MOP were on board to answer whatever questions the analysts might have in mind. From the foot of Canal Street the trip took the analysts south almost to Lake Pontchartrain. After retracing our steps, we continued northward over the Hugh Long Bridge, and returned to New Orleans. Importance of the industrial facilities and docks on both banks of the Mississippi was pointed out by railroad personnel. Analysts were surprised to see the dominant position occupied in New Orleans by the Illinois Central.

Our members taking these tours are deeply indebted to all railroad officials who made these trips possible. Co-operation actually received was well beyond the normal call of duty. The Editors would like to acknowledge publicly their debt of gratitude to all those who made it possible for analysts to obtain a better understanding of the industrial and railroad facilities of the most important cities visited on our tour.

RICHARD W. LAMBOURNE

Field Trips on the West Coast

View of part of South Cuyama Oilfield from small height; visiting analysts in foreground

From a bayside room window of the Fairmont Hotel, with the help of binoculars, the historic ferryboat *Sierra Nevada* could be seen off Point Richmond in the late afternoon making her way slowly into the Bay of San Francisco. On a clear day, of course, no binoculars would be necessary, but this was Wednesday, May 7, 1952, the first and only day out of two weeks that it had rained. Indeed the three days before were glorious examples of California weather for the express benefit of out-of-state analysts at the Fifth Annnal Convention.

The *Sierra Nevada,* after passing Tiburon, Angel Island, and Treasure Island (the scene of the 1939 World's Fair), then steamed under the San Francisco–Oakland Bay Bridge and turned due west toward the Ferry Building. At that precise moment the clouds dispersed, and all on board were treated to the panorama of San Francisco, bathed in golden sunlight—a fitting climax to P. G. & E.'s "Boat-Ride-on-The-Bay."

Those few nonbelievers who stayed in their hotel beds Wednesday morning, on hearing the rain dripping outside, "missed not only the boat" but also the splendid trip to Santa Clara County. Fortunately most of the visiting analysts and wives, fully hardened to the rigors of the Special Train and bus rides, were out in front of the Fairmont on time. There our amiable field trips chairman, Jack Beckett, and his assistants herded everyone on the buses, and they were off—accompanied by a sizable contingent from San Francisco as hosts and participants. After locating a missing utility "specialist" in the coffee shop, the Feather River Caribou entourage got under way for their two-day sojourn among P. G. & E. power plants in the High Sierra.

The weather on Thursday, May 8, turned out bright and warm for the six field trips scheduled for that day, all very well attended (including, naturally, the trip to the vineyards). In spite of the Greyhound Bus strike, which required considerable use of substitute buses of older age, each trip ran right on schedule to bring our guests back to San Francisco in time to meet the Special Train departing for Los Angeles. The exception, of course, was the two-plane trip to the Cuyama Oilfields as guests of Richfield Oil and thence to Los Angeles by plane Thursday.

The Special Train, incidentally, created a sensation as it passed at violent speed through the peaceful suburb of Palo Alto Thursday evening. Observers there, including a number of San Francisco Society members and wives waiting to board the Southern Pacific "Lark" for Los Angeles, would swear that the engineer at the throttle was none other than Pierre R. Bretey, himself!

At an unholy hour on Friday morning (May 9), the Pacific Northwest trip contingent repaired to the Oakland Airport, where they spent several hours watching their chartered plane undergo repairs. But all turned out well for these now seasoned veterans who were able to join in the fabulous Northwest trip with Herbert B. Drake as major domo in charge.

Meanwhile the excellent Friday trips in Los Angeles attracted a "sellout" participation. The Los Angeles Society officials met the Special Train at Glendale, and in no time at all some three hundred analysts were being escorted through industrial plants scattered all over the Greater Los Angeles Area—or going through the CBS studios to view Marie Wilson and other attractions—with visiting wives off on an elaborate sightseeing tour of their own.

On Saturday those in superior physical condition either toured the area by flat car with Pierre Bretey and Southern Pacific or went to San Diego by special train arrangements with Truslow Hyde leading the way.

How well Jack Beckett, Dick Link, and their field trip committees had planned for so many months, with the aid of others in the San Francisco and Los Angeles Societies, may be gaged from the brief summaries of field trips included in this PROCEEDINGS issue. We are hopeful that the variety of trips, the fine co-operation of all of the host companies, and the weather, too, were such that visiting analysts returned home convinced that the West Coast is not only one of the country's great scenic spots but a land of opportunity as well.

GEORGE M. HANSEN

TRIP A

Contra Costa County

Those of us who had gathered in the entrance of the Fairmont Hotel on Wednesday morning, May 7, dashed through a driving rain to the nearest available bus. The Pacific Gas & Electric Company had chartered eight such buses to take approximately 250 analysts and their wives over the eight-and-a-half-mile-long Bay Bridge for a tour of Contra Costa County.

This county has increased in population in greater proportion than any other during the last decade of terrific migration to the West Coast. At one time, it was predominantly an agricutural area and some vestige remains. However, it has become an important industrial area, and one of the first things we saw was Tidewater Associated's Avon refinery. This is just one of many refineries in the area and one of three where the P. G. and E. operates a steam plant adjacent to the property, burning low-grade fuel acquired from the refinery in exchange for steam and electricity.

We drove through the Navy's ammunition dump at Port Chicago and by the Shell Chemical Plant. The next major point of interest was U. S. Steel's Columbia plant just outside of Pittsburg and next to it was one of the largest of the Dow Chemical plants.

After some two hours on the bus, we arrived at the giant Contra Costa steam-electric plant of Pacific Gas and Electric Company. Our conducted tour through the plant disclosed that three 100,000-kilowatt generators are on the line and two more are being added. After a very interesting meeting that disclosed the large area served by P. G. & E. on a relief map, we boarded our buses and journeyed to the neighboring pulp and paperboard plant of Fibreboard Products, just across the way at Antioch.

A real high light of the trip was to watch the debarking of huge logs by water pressure and the great "chipper" machine that chews logs up at one gulp. Then the chips are "cooked" into wood pulp and processed into paper and paperboard of many grades.

As the first buses were pulling onto the pier at Antioch, the ferryboat *Sierra Nevada* was coming around the bend and tied up at the Antioch wharf.

Shortly after we boarded the ferryboat, a wonderful luncheon was served, and, as we made our way down the San Joaquin River, points of interest were explained. One of these was the location of the new Pittsburg steam-electric plant, which will be the largest west of the Mississippi and one of the five largest in the world, when all five 150,000 units are installed.

The remainder of the ferryboat trip, down the Straits and into the Bay, was one of continuous entertainment and delightful sightseeing that included a circle around Treasure Island, by Hunter's Point Naval Yard, under the great Bridge, and through the slip at the historic Ferry Building. The same buses were waiting for us and returned us up Nob Hill to the Fairmont Hotel. The Pacific Gas & Electric Company was a perfect "host" and won our plaudits for a splendid trip long to be remembered.

The historic ferryboat *Sierra Nevada* provided by Pacific Gas & Electric Company for field trip A of the western tour of industry; analysts coming on board at Antioch

George Shimmon

PHILIP A. FISHER

TRIP B

Santa Clara County

Lancaster Greene

Strong analysts lift light aluminum pipe at Ford Machinery, San Jose, California

On the morning of May 7 four busloads of approximately 145 visiting analysts left Convention headquarters at the Fairmont Hotel in San Francisco to arrive in the middle of the morning at the Owens-Corning Fiberglas plant at Santa Clara. There the company provided them with guides, in the ratio of one guide to every five analysts. It was thus possible in a relatively short period for each analyst to obtain a surprisingly clear picture of the operations of this plant from the raw material receiving docks through the manufacturing processes to the point of ultimate shipment from the plant. This permitted a meeting with L. R. Kessler, vice-president of the company and plant manager, at the plant cafeteria. Mr. Kessler explained at some length about the ultimate markets for the company's products, the nature of competition for these products from other materials, and future growth possibilities. Following his talk there were questions from the analysts concerning particular phases of the operation which were of special interest to them.

GUESTS OF FOOD MACHINERY

On leaving the Owens-Corning plant, the analysts proceeded to the DeAnza Hotel in the neighboring town of San Jose, where they were guests at luncheon of the Food Machinery and Chemical Corporation. Mr. Joseph B. Carey, executive vice-president, acted as master of ceremonies. An unusual feature of this luncheon was that analysts were seated at oblong tables holding about a dozen each. At the head of each of these tables was a division manager or other major executive of Food Machinery to act as host. This permitted analysts to make a personal size-up of at least one key member of this company's versatile management team and to ask questions about their operations.

After the luncheon there was a twenty-minute colored picture, showing both the major plants of Food Machinery and the principal products and processes turned out by each plant. With this as basic background material, President Paul L. Davies then gave a talk on various phases of the company's problems and prospects, endeavoring to take an analyst's viewpoint on both some of the strong and some of the weak features of the prospects that lie ahead.

The group then proceeded to the canning machinery division of the company and saw a number of the company's machines in operation. In order to give working demonstrations of such products as the company's automatic peach feeder and peach pitter during a period when, for seasonal reasons, peaches were not available, apples and other fruits were run througth the machines to make the demonstration more realistic. The analysts moved on to the John Bean division, where they saw such products as fog fire-fighting equipment, giant spray pumps, and automatic walnut pickers. After having been approved individually by Army authorities for security reasons, they passed through the company's giant T-18 Personnel and Light Equipment Carrier Tank producing facilities and the testing grounds where these completed tanks are put through performance tests. In the company's artificial lake they saw demonstrations of the new T-18 amphibian.

INTERNATIONAL MINERALS & CHEMICAL

Next the tour proceeded to the International Minerals and Chemical Corporation's San Jose plant, which manufactures the well-known "Ac-cent" product. By means of a loudspeaker system they were given an informative talk on the background and potentialities of this unique amino product, followed by a thorough plant tour in which the highly mechanized nature of the manufacturing technique was explained. On reboarding their buses the analysts found that this company had not only provided a generous supply of liquid refreshments to ease the burdens of the return to San Francisco but also, as a bartender and host, had provided each bus with an expert who gave them additional information about Ac-cent. To complete their hospitality, shortly after returning to their homes throughout the Nation, each participant of the trip received from International Minerals a kit personally sent to them containing a generous supply of this unusual product.

SAMUEL B. JONES

TRIP C

Point Richmond

The trip to the Point Richmond Refinery (on San Pablo Bay) of the Standard Oil Company of California ranks among the best of the various field trips. My reaction was that the Richmond operation typified much of what we Easterners admire in West Coast industry. There was the spaciousness of the plant layout which is characteristic—1,900 acres of refining property occupying most of the entire neck of land. There was the orderly housekeeping which gave the whole operation the appearance of efficiency. There were no blobs of grease to avoid. The package and grease plant's automatic dispatching machine worked with effectiveness equal to a pushbutton railroad classification yard.

WORKING CONDITIONS

The working conditions must certainly be the envy of an Eastern competitor. Recreation facilities for the 3,700 workers and their families would put to shame most athletic–country-club combinations. The emphasis on research impressed us all. The discussions of petrochemicals by research officials, the illustrations by end products, the trip through the laboratories, and of course the Dacron ties made a great hit with all of us.

Particularly were the friendly welcome and hospitality extended by Mr. Elmer Peterson and his staff—highlighted by juicy barbecued steak eaten on the picnic ground overlooking the Rod and Gun Club and swimming pool—most agreeably appreciated.

Aerial view of the Point Richmond Refinery of Standard Oil of California, visited by analysts on field trip C

Moulin Studios

RONALD C. BRINDLEY

TRIP
D
East Bay Hills

The financial analysts taking the May 8 Pacific Telephone–Rheem Manufacturing field trip were transported by bus from the Fairmont Hotel over the Bay Bridge to the East Bay Hills Radio Relay Station, the northernmost station of the San Francisco–Los Angeles Radio Relay System, located in the hills above Berkeley at an elevation of 1,700 feet.

There they were shown the equipment in operation that makes this new type of communication system function for television and also long-distance telephone. The system was placed in service by Pacific Telephone on September 15, 1950. Starting at the terminal in San Francisco, the route crosses the bay to the East Bay Hills station, a distance of 11 miles, and from that point is relayed southward from one mountain top station to another until it reaches the Los Angeles terminal. It is interesting to note that the East Bay Hills station also is the last relay station of the transcontinental system extending from the East to the West Coast.

The analysts learned that in the San Francisco–Los Angeles system:

1. There are 11 relay stations, including terminals.
2. Total length of route is 376 miles.
3. Average distance between stations is about 346 miles.
4. Highest point on route is 5,280 feet above sea level.
5. Lowest point is 400 feet above sea level.
6. System operates at a frequency range of 3,700 to 4,200 megacycles.
7. Length of wave beamed is 3 inches.

The trip up the winding canyons to the station and the magnificent view from the hills were an especially delightful feature of the tour.

At the conclusion of the inspection the group dropped down to Berkeley, where they had lunch at the Claremont Hotel.

Immediately after lunch, a short ride through Berkeley, site of the University of California, brought the tour to the Richmond plant of Rheem Manufacturing Company. This is the oldest of the company's 22 plants, which circle the globe. A remarkable example of a growth company, Rheem in the short twenty-six-year span of its existence has become the world's largest manufacturer of steel shipping containers, automatic water heaters, and a large number of other home comfort appliances.

First on the program was an inspection of the famous "high-speed" pail line. Pails are generally of 5-gallon capacity, but range from 1 to 15 gallons. They are used to package paint, lubricants, chemicals, and a wide variety of products. The analysts watched this almost completely automatic line, with equipment designed and developed by the company, turn out 1,200 five-gallon pails an hour.

The microwave television antenna station of Pacific Telephone & Telegraph Company in the East Bay Hills

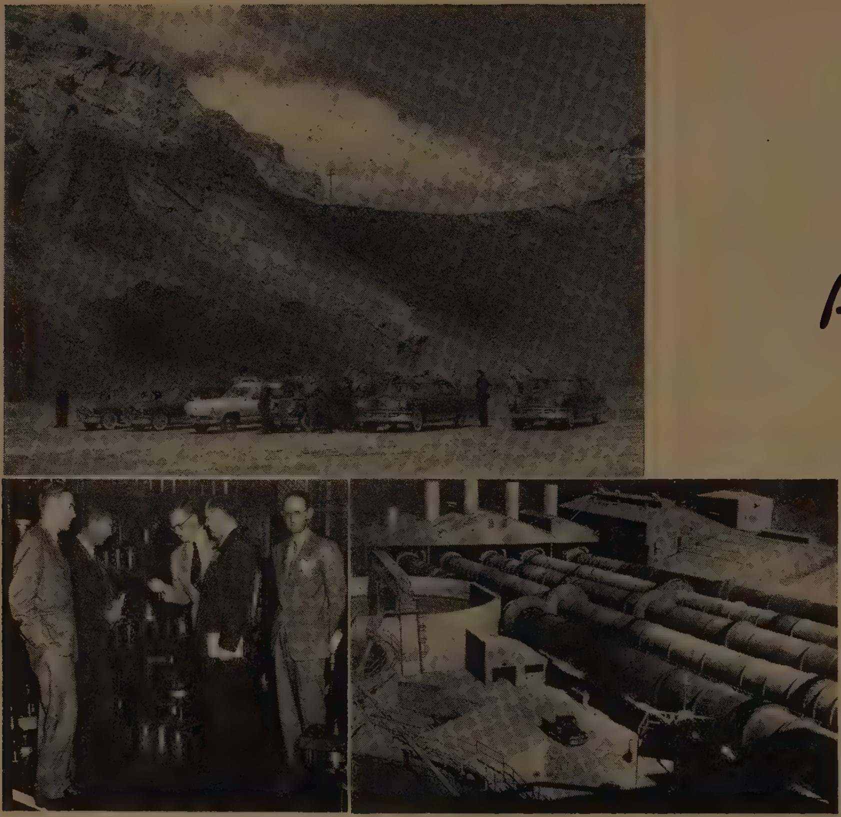
Of chief interest, however, was the second half of the visit, a complete tour of the "Rheemcote" high-speed drum line. Developed by Rheem, this process lithographs drum body, head and bottom sheets before fabrication, into 55-gallon drums. Any design that can be reproduced by lithography, and in the complete range of colors, can be utilized to decorate the drum. The steel sheets are first shot-blasted and chemically scoured to prepare them to receive the specially developed paints, inks, and lacquer interior linings. After passing through the world's largest metal-decorating lithography press, the sheets pass through a baking oven 140 feet long. The fabricating process is also a special Rheem development. After receiving a side seam weld, instead of the customary "flash" weld, the drum bodies are formed, curled, pierced, and expanded without damage to the "Rheemcote" finish. The visitors were fascinated by the almost fluid properties of the sheet steel as it was cold-worked by the automatic double seamer, which literally spins on the tops and bottoms. The end product is a drum that is not only a traveling billboard for the product it contains, but also a container with a baked-on finish that is much more durable than ordinary paint.

After the plant tour and before returning to San Francisco, the group met with Rheem executives at the plant cafeteria for refreshments and informal discussion.

ROBERT H. DENNINGER

TRIP E

Peninsula



In the pictures: *(Top)* Analysts inspecting Permanente Cement Company's quarry near plant, in Los Altos, California. *(Lower left)* William Richey of National Motor Bearing showing a group of analysts through the company's die crib. Dies required to manufacture some two thousand different sizes and designs of oil seals are stored here. *(Lower right)* Giant rotary kilns, 12 feet in diameter and 463 feet long, at Permanente Cement Company's plant

A group of approximately 50 analysts visited three Kaiser operations at Permanente, Calif.—Permanente Cement Company's plant, Kaiser Aluminum & Chemical Corporation's foil mill and ferrosilicon plant, and the National Motor Bearing Company's plant at Redwood City, on May 8, 1952, as part of the Convention field trip itinerary.

National Motor Bearing Company is one of the growth companies in the West. It was founded in 1921 with $1,200 borrowed capital as a connecting rod repair shop in San Francisco. A year later it expanded into shim manufacture and in 1929 began to manufacture oil seals. Today it is believed to be the largest oil seal maker in the world. National oil seals are found wherever shafts turn.

When the analysts arrived at the National Motor Bearing plant, they met executives of the company informally over coffee served in an employees' lounge, then moved on to the conference room, where Vice-President A. E. Werolin, in charge of administration and planning, spoke briefly of the company's history and objectives, and Sales Director L. C. Cole discussed oil seal applications and prospects for market expansion. The visitors were then escorted in small groups through the manufacturing area to observe fabricating processes.

A luncheon at the beautiful Menlo Country Club was cohosted by officers of the participating companies, including Horace Kiser, manager of public relations, and D. O. Johnson, vice-president of NMB; Henry J. Kaiser, Jr., vice-president of the Henry J. Kaiser Company; Wallace A. Marsh, vice-president and general manager of Permanente Cement Company; and Donald Browne, vice-president and treasurer of Kaiser Aluminum, among others.

After luncheon the buses went directly to the Permanente Cement plant, one of the three largest in the world. Built twelve years ago as a modest 2,500,000-barrel plant to serve a comparatively restricted northern California market, the plant has steadily expanded until today it has an annual capacity of 7 million barrels and a chain of distribution facilities and fleet of bulk cement steamships supplying construction from southern California to Alaska and to the Hawaiian Islands.

Next the group moved on to the adjacent Kaiser Aluminum foil mill. It is the only such mill west of St. Louis, supplying independent manufacturing plants which convert foil for use in all types of packaging, labels, decorations, electronics, insulation, building materials, medicine, lithography, radiant heating equipment and military items. The mill also packages a portion of its output into household foil for national distribution under the brand name "Kaiser Foil." It is currently expanding to an annual capacity of 18 million pounds.

The Kaiser ferrosilicon plant, the last to be visited, recently was reactivated to produce ferrosilicon as raw material for the production of magnesium metal for the Government at a nearby Kaiser-operated plant.

Full of facts and information, the analysts on field trip E returned by bus via a scenic route to San Francisco.

LEWIS B. REYNOLDS

TRIP F *Napa Valley Vineyards*

Taking time off from business, a party of more than one hundred analyst delegates and wives attending the National Convention on May 8 were the guests of Beaulieu Vineyard at the estate in Napa Valley 70 miles northeast of San Francisco.

The Marquis and Marquise de Pins, owners of Beaulieu, were hosts for the entire trip, the high light of which was an "al fresco" luncheon served under an arbor of trees by a lawn-fringed swimming pool. The guests not only looked at but also tasted of Beaulieu wines, before, during, and after the luncheon. Analytical powers of the assembled palates were brought to bear on Beaulieu's red, white, and rose table wines, and on sherries, ports, and muscat.

Rudy, the estate's old gardener, personally presented each feminine guest with a rose freshly cut from his boxwood-bordered enclosures. Every guest, as a parting souvenir of his visit, was given a bottle of one of Beaulieu's choice vintages.

Leaving the Fairmont Hotel that morning, the day's trip enabled the group to circle most of San Francisco Bay via its three principal bridges (Golden Gate, Carquinez Straits, San Francisco–Oakland), to see San Francisco's famous city-front Marina yacht harbor, get distant glimpses of both Alcatraz and San Quentin prisons, and view suburban Marin and Sonoma counties en route to the Napa Valley.

At the town of Sonoma, birthplace of the California Republic in 1846, a brief stop was made, and one of the famous California missions—San Francisco de Solano—was visited.

Another half-hour's ride through the vineyard-studded Napa Valley, where some of California's finest table wines are produced, brought the group to Beaulieu, surrounded by its vineyards at the foot of the Mayacamas Mountains. A tour of the winery followed luncheon, the guests learning directly from wine makers the materials and processes required in the art of fine wine making.

The trip back to San Francisco was via another route—the Silverado Trail, named after the quicksilver mine on Mount St. Helena, at the head of the valley, where Robert Louis Stevenson once lived. (The mountain, incidentally, was discovered and named by the Russians, and marked the easternmost limits of their expansion during their occupation of northwestern California in the early nineteenth century.)

The wine tour arrangements committee of the host Society included: Lewis B. Reynolds, chairman, Peter Avenali, William P. Held, Richard W. Lambourne, and Thomas L. North.

(Top of page) **Gardens of Beaulieu;** *(lower left)* **the winery;** *(lower right)* **the vineyards**

Moulin Studios

E. MORRIS COX

TRIP G

Scenic Flight

Forty-six members of the NFFAS group, who attended the May Convention at San Francisco, were one-day guests of United Air Lines during their stay, on Thursday, May 8.

Never have so many seen so much—in so little time as these visitors who made a 500-mile aerial swing of California in an hour-and-a-half flight aboard a United DC-6.

MULTIMILLION-DOLLAR MAINTENANCE BASE

The analysts first had luncheon at United's multimillion-dollar Maintenance Base at San Francisco, and toured the "pushbutton" overhaul headquarters of the air line's fleet.

Boarding a special DC-6, which United officials set aside for their use, the visitors cleared the San Francisco airport at 2 P.M., and swung north across the Golden Gate Bridge. Circling the giant campus of the University of California at Berkeley, the analysts flew south for an aerial view of East Bay cities and of industrial and shipping sites along the length of the Bay.

SAN JOAQUIN VALLEY

With visibility unlimited, they circled the State capital at Sacramento and then surveyed the lush agricultural areas of the San Joaquin Valley. A scenic high light of the flight was a swing above the High Sierra over Lake Tahoe and Yosemite.

COVERED NEARLY 500 MILES

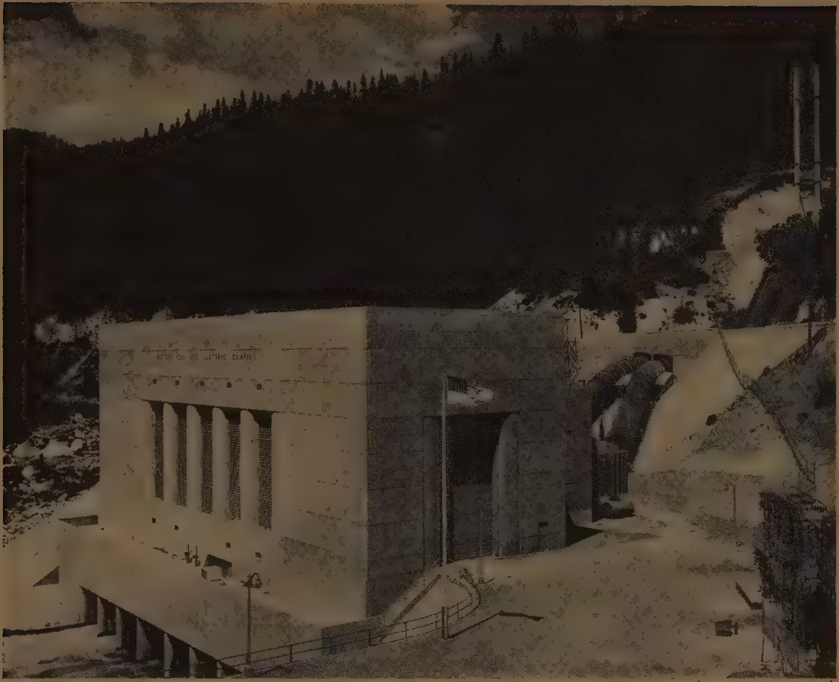
Only 90 minutes after take-off, the visitors were back in San Francisco. They had covered nearly 500 miles of California's richest industrial and agricultural areas, in less time than it took them to get to the airport and back by bus. It was a thrilling event.

At the huge overhaul and maintenance base of United Air Lines at the San Francisco Airport, ground crews and tractor guide a DC-6 into pushbutton dock. Plane nose-wheel follows white line into dock which is 110 feet long and 131 feet wide

CARL C. BROWN

TRIP

H



The 101,000-horsepower Cresta Powerhouse of the Pacific Gas & Electric Company in the Feather River Canyon

Feather River Canyon

Some thirty utility specialists attending the Fifth Annual Convention climbed aboard a bus in front of the Fairmont Hotel on Wednesday morning, May 7. Our bus proceeded across the Golden Gate Bridge through the rich farming lands of the Sacramento Valley to Oroville, where luncheon was served at the Oroville Inn by our host, the Pacific Gas & Electric Company.

CRESTA POWERHOUSE

After luncheon, we trekked up the Feather River Canyon to Cresta Powerhouse, one of the two new hydroelectric plants on the scenic Feather River built since the war by P. G. & E.

75,000-KILOWATT PLANT

Since it was raining, our bus drove right into the power plant, affording us an opportunity to realize the size of this 75,000-kilowatt plant. We saw the lake formed by Cresta Dam and the Rock Creek Powerhouse, which generates 126,000 kilowatts of electricity. The next visit was over to the Bucks Creek Powerhouse, which has the highest head of any commercial plant in the United States. Its penstock, which is nearly a mile long, drops the water 2,600 feet.

After passing the lake formed by Rock Creek Dam, we turned off to a winding road that had formerly served as the roadbed of a narrow-gage railway that was used in the construction of Caribou Powerhouse.

CARIBOU POWERHOUSE

In a mere matter of eight miles we climbed 700 feet and came upon a veritable garden spot which serves as a living area for those working at P. G. & E.'s Caribou Powerhouse—the "Caribou Lodge" in the High Sierra.

There we enjoyed a fine dinner and a delightful evening. *Kilowatt Builder,* P. G. & E.'s recent motion picture, was shown, and a discussion between company officers and analysts followed. Company officers present were L. H. Anderson, vice-president and assistant general manager; Walter Dreyer, vice-president and chief engineer; and Kenneth C. Christensen, treasurer.

After breakfast on Thursday, we came back on the Feather River by a different route upon leaving Oroville, and lunched at the Sutter Club in Sacramento across from the State Capitol of California.

After luncheon we proceeded to the Contra Costa steam-electric plant of P. G. & E. at Antioch and back into San Francisco via the Bay Bridge. The whole trip was a delightful experience and a real professional "treat" for utility specialists.

WALTER PODOLAK

Cuyama Oilfields

Hubbard Russell, owner of the Russell Ranch which was part of the fabulous Cuyama oil strike of Richfield Oil, talks to analysts about the field

The field trip activities of the Los Angeles Society for the Convention of the National Federation were held on May 8 and 9, 1952. Because of limited time the schedule was both extensive and intense.

RICHFIELD OIL

The program in southern California began on May 8 when Richfield Oil was host on a trip to its Cuyama discovery. The company provided three ships—two DC-3s and one Convair Liner. There were approximately 70 analysts in attendance and about 10 or 15 officials of the Richfield Oil Corporation. The planes took off promptly at 10 o'clock from San Francisco and completed the 250-mile trip in a little over an hour. Upon arrival the analysts were taken by bus on a 5- or 6-mile tour around the South Cuyama Field. Messrs. Morgan and Montgomery, vice-presidents of Richfield Oil Corporation, led the group through the different interesting areas of the field. Also in attendance were Mr. N. F. Simmons, assistant to the president, and Roland Eckis, chief geologist for Richfield Oil.

CUYAMA FIELD

The group then proceeded to the only restaurant in the area, Cuyama Buckthorn, where the company had prepared a lavish barbecue and reception. The group was wined and dined in an unusually satisfactory fashion considering the fact that the Cuyama Field is relatively isolated from the more thickly populated areas of California. Mr. Hubbard Russell, the owner of the Russell Ranch, was also present and turned out to be quite an interesting companion. After lunch the group retired to a conference room where Messrs. Morgan, Montgomery, and Eckie spent the better part of an hour and a half in reviewing the operations of Richfield Oil and answering a great many questions concerning the famous Cuyama find of the corporation. When this meeting was ended, the men were conducted on a tour of the refinery which was recently completed in the area. About 4:30 the analysts left by plane and by 5:30 had landed at the Los Angeles International Airport.

FIELD TRIPS ALL-DAY AFFAIRS

Activities continued on May 9 at 9 o'clock when the Bretey Special arrived in the Glendale station. Buses were available, and all of the field trips began immediately after the arrival of the train. The field trips were all-day affairs, as follows:

1. Lockheed Aircraft Corporation and Columbia Broadcasting System.
2. North American Aviation, Inc., and Douglas Aircraft Company.
3. Kaiser Steel Corporation.
4. Industrial Tour.
5. Ladies' Surprise Tour.

Buses left the Glendale station for the Lockheed Aircraft Corporation plant in Burbank. Approximately 70 analysts joined this tour. Upon arrival at the plant at about 10:30 A.M., the group was taken to several of the more interesting divisions at Burbank. The intricate art of producing jet airplanes and commercial transports was explained briefly by several of the officials during this early morning tour. At noon the group was taken to the "Sky Room" of the Air Terminal Building at the Burbank airport, where a delightful luncheon was served. The officers of Lockheed Aircraft Corporation attending this lunch were Messrs. Gross, Squier, and Chappellet, vice-presidents, and Mr. Barker, treasurer of the corporation. After lunch the analysts were given an extensive briefing on the operations of the corporation and the outlook for the industry in the present semiwar economy. Messrs. Gross, Squier, and Barker addressed the group and answered a great many questions which were enlightening and informative.

COLUMBIA BROADCASTING STUDIOS

Promptly at 1:30 the analysts left the Sky Room for a fast trip by bus to the Columbia Broadcasting studios in Hollywood. It was necessary to arrive promptly at 2 o'clock, since Columbia had planned a very full and in-

and Los Angeles Trips

teresting program for the visitors. At the entrance to the studios there was a large marquee sign welcoming the analysts. The group was conducted through a number of interesting parts of the television studios, and one of the high lights of the visit was the dress rehearsal of the show *My Friend Irma.* Several corporation executives were on hand to answer some of the questions of the analysts. The visit of the group was announced over the air nationally. At 4 o'clock the group left the studios for the financial district, where the Los Angeles Stock Exchange was host at a cocktail party and reception.

NORTH AMERICAN AVIATION

The tour of North American Aviation at the International Airport and Douglas Aircraft at Santa Monica was of great value and significance. In both instances the officers of these corporations were very co-operative in presenting resumes of current operations of their companies after extensive tours of the assembly plants. A great deal of information was obtained from question and answer periods which took place on both these tours. Douglas Aircraft was host at a luncheon during the day for the group of 50 analysts on this trip.

(Continued on next page)

Photos: *(Top)* Ceco stamp; *(center)* Birdsboro hydraulic press; *(lower left)* Hufford stretch press; *(lower right)* Cincinnati milling machine; all in the Hall of Giants, Lockheed Aircraft, Burbank, California

Lancaster Greene

Richfield oil refinery, Cuyama, California

On the same morning of May 9 a group of 65 analysts left the Glendale station for a 35-mile trip to Fontana and the Kaiser Steel Corporation plant. On arriving, the analysts were taken to a wonderful barbecue. A tour of the various facilities of Kaiser Steel Corporation was made. The analysts spent an hour with several officers of the corporation who conducted the usual business meeting, which consisted of a review of the operations of the corporation and the future outlook, and discussed some of the plans the corporation had for the western area.

The industrial tour on May 9 was attended by about 50 analysts, accompanied by Los Angeles Chamber of Commerce officials, who were able to point out the various industrial points of interest to the group. The large generating plant of Southern California Edison was one of the high lights of this trip where officials were on hand to greet visiting analysts. Around noon the city of Long Beach provided a large boat for an inspection of the harbor facilities. Box lunches were provided, and officials from the city of Long Beach were "on deck." At about 3 o'clock in the afternoon the group continued its trip back by another route through the industrial heart of Los Angeles and finally arrived at around 4:30 at the Los Angeles Stock Exchange, where all of the field trips converged.

LADIES' FIELD TRIP

The ladies' field trip, on the morning of May 9, was attended by about 85 women, wives of Los Angeles members and of visiting analysts. The women left Glendale and proceeded west past many points of interest in the city. The first stop was the "Beach Club" in Santa Monica, where the women were given an opportunity to view the beach facilities and obtain light refreshments. The buses then proceeded through some of the more scenic residential sections of West Los Angeles and Santa Monica and finally arrived at the New Westwood store of Bullock's. This store is particularly noted for its fine-quality merchandise and modernistic appearance. The women were delighted with the surroundings of this new building and also with the merchandise and display for which the company is so famous. A special luncheon was provided, during which the store staged an entertaining fashion show for the group. Around 2:45 P.M. the group left the store and proceeded through some of the residential sections of Bel-Air, Brentwood, and Hollywood. This took the better part of an hour, and the ladies were returned at 4:30 P.M. to Spring Street and the Los Angeles Stock Exchange reception.

The Los Angeles Society members were hosts at the closing dinner given in the Embassy Room at the Ambassador Hotel. The function began at 8:15, May 9, directly after the reception given by the Los Angeles Stock Exchange, and is covered elsewhere in the PROCEEDINGS.

This concluded the Convention week. The members who were on the Special Train and visiting analysts from San Francisco remained through Saturday. Some collected in various informal groups for rest and refreshments, and others joined in the trip to San Diego Electric, Consolidated Vultee, and the Southern Pacific "flat car" tour of the area.

The
Norwich Pharmacal Company

Norwich

200th
Common Dividend

The Board of Directors has declared this day the 200th quarterly dividend, in the amount of 20 cents per share, on the outstanding common stock of the Corporation, payable on September 10, 1952, to share owners of record at the close of business on August 18, 1952.

JOHN I. HORAN, Secretary
July 30, 1952

AVCO MANUFACTURING
"A Family of Famous Names"

The Board of Directors of Avco Manufacturing Corporation has declared a quarterly dividend of 15 cents a share on the Common Stock payable September 20, 1952, to stockholders of record August 29, 1952.

R. S. Pruitt, Secretary

420 Lexington Ave.
New York 17, N.Y.
July 25, 1952

HOWARD THARSING

TRIP J

Pacific Northwest

Analysts being greeted officially by Miss Spokane on arrival in Spokane by Stratocruiser

The forty analysts and members of the press who visited the Pacific Northwest after the Convention found a young, vigorous, expanding economy, solidly based on the abundant natural resources of timber, waterpower, nonferrous metals, and agriculture. The industrial operations visited compared favorably with similar operations elsewhere. The privately owned public utilities have made considerable progress in learning to live with the public power organizations in the area, and enjoy very satisfactory relations with the citizens they serve. These are the broad general conclusions reached by the majority of the group which spent seven days visiting the area under the auspices of eleven of the area's leading companies, including Anaconda Copper Mining Company, Crown Zellerbach Corporation, Georgia-Pacific Plywood Company, Kaiser Aluminum & Chemical Corporation, Montana Power Company, Mountain States Power Company, Pacific Power & Light Company, Portland General Electric Company, Scott Paper Company, Washington Water Power Company, and Weyerhaeuser Timber Company.

Chronologically, the group left San Francisco by chartered plane on Friday morning, May 9, and spent that afternoon in the Eugene area making brief inspections of the Weyerhaeuser and Georgia-Pacific plants and then went on to Portland for a splendid and informative dinner meeting with the public utility executives of the area. Saturday was devoted to an inspection tour of Crown Zellerbach's 130,000-acre Clatsop County Tree Farm and its 59,000-acre Columbia Tree Farm, where modern forestry practices and reforestation methods were demonstrated. Sunday the group saw Crown Zellerbach's largest and most flexible paper mill at Camas, Wash., and visited the Yale Dam Project of Pacific Power and Light scheduled for completion late this year, as well as Bonneville Dam on the Columbia. Monday's inspection visits included the large Olympia plant of Georgia-Pacific Plywood, unfortunately shut down by a strike, and the very modern and efficient operation of the Soundview Pulp Mill of Scott Paper at Everett, Wash. On Tuesday the group flew to Spokane for talks with the officials of Washington Water Power and a visit to the nearby Mead reduction works of Kaiser Aluminum & Chemical. Wednesday was spent in the vast Trentwood rolling mill of Kaiser Aluminum, and on Thursday the party saw Anaconda's mining operations in the "Richest Hill on Earth" at Butte and then traveled on to Great Falls, Mont., to view the smelting, refining, and reduction operations and the wire mill of Anaconda and to consult with officials of Montana Power (with excellent luncheons and dinners at all these stops).

In view of the vast area covered and the size and diversity of the operations visited, it is obvious that space limitations prevent publication of more than a brief summarization of the high lights of the members' generous replies to a request for their impressions of the area, its people, and the companies and operations visited.

1. It was the almost unanimous conclusion of the group that the area will continue to enjoy above-average growth because of a combination of available space, good climatic conditions, cheap power, and large natural resources. The hope was expressed that it would be possible to broaden the industrial base so that the area would be less heavily dependent on lumber and mineral operations. This factor was viewed more as a possible temporary brake on progress than as any real threat to long-range growth.

2. The analysts responded most favorably to the hospitality, friendliness, and progressive spirit of the people of the area, who quite understandably have a real enthusiasm for and confidence in their country. Some commented that this spirit probably contributed substantially to labor efficiency and quality of output. It was noted that there was high morale in many of the industrial operations.

3. Many analysts commented that they found the problem of public power versus private power to be substantially less pressing than they had feared. The majority conclusion was that the power situation appears to be

Kinsey Robinson, president of Washington Water Power, addresses noon luncheon at Davenport Hotel, Spokane

stabilizing, that the privately owned utilities have very good progressive public relations programs, and that there is presently little agitation for public ownership outside of completing the take-over of Puget Sound Power & Light. The accomplishments of the vast Northwest Power Pool would fill a book. There is no surplus of power, but a continuing shortage due to steady demand growth.

4. In regard to the industrial operations visited, the analysts generally were favorably impressed with the management and operation of all four of the companies, which were rather fully inspected. (Because of schedule difficulties and delays only a brief view of the Weyerhaeuser operation was possible, and the area-wide strike of the CIO woodworkers prevented a thorough view of Georgia Pacific Plywood properties. As a result the majority of the members did not offer comments on these companies.) Several analysts offered the opinion that the Anaconda, Crown Zellerbach, Kaiser Aluminum, and Scott Paper operations compared favorably with similar situations in other parts of the country. Many were particularly impressed with the magnitude of Anaconda's "Greater Butte Project" and the prospects of a long future life for the "Richest Hill on Earth."

Any summary of the trip would be very sadly lacking if it did not pay tribute to the fine hospitality and splendid co-operation of the managements of the companies which made the trip possible. They were all most thoughtful in the arrangements made for accommodation and gave freely of their time and effort in providing the answers to questions raised by members of the party. Herb Drake of the San Francisco Society, who was responsible for the conduct of the tour, worked tirelessly and at considerable inconvenience to himself to make the experience an enjoyable one for every member of the group. It was an outstanding part of the Fifth Annual Convention field trip events.

To any analyst who has not been in the Pacific Northwest the foregoing highly complimentary remarks will inevitably raise the question as to the factual quality of the presentation. From the tenor of almost all of the comments received, this question occurred to the analysts themselves. Certainly it occurred to Earl Meyer of the Chicago Society, who probably summed it up for most of us when he wrote: "Perhaps this all sounds too complimentary and favorable, but that is my impression. I hope I'm right."

Newport News Shipbuilding and Dry Dock Company

Quarterly Statement of Billings, Estimated Unbilled Balance of Major Contracts and Number of Employees

Billings during the period:	**Three Fiscal Months Ended June 23, 1952**	**Three Fiscal Months Ended June 25, 1951**	**Six Fiscal Months Ended June 23, 1952**	**Six Fiscal Months Ended June 25, 1951**
Shipbuilding contracts	$24,788,936	$12,827,004	$37,035,540	$19,038,114
Ship conversions and repairs . .	16,241,653	8,027,243	24,874,300	12,788,042
Hydraulic turbines and accessories .	906,804	1,127,780	2,034,516	1,965,676
Other work and operations . . .	3,214,502	2,365,711	5,508,366	3,996,213
Totals	$45,151,895	$24,347,738	$69,452,722	$37,788,045

	At June 23, 1952	**At June 25, 1951**
Estimated balance of major contracts unbilled at the close of the period	$306,025,717	$211,944,036
Number of employees at the close of the period	16,134	11,418

The Company reports income from long-term shipbuilding contracts on the percentage-of-completion basis; such income for any period will therefore vary from the billings on the contracts. Contract billings and estimated unbilled balances are subject to possible adjustments resulting from statutory and contractual provisions.

By Order of the Board of Directors

July 23, 1952.

R. I. FLETCHER, *Vice President and Comptroller*

Reports of National Committees

National Federation of Financial Analysts Societies

Committee on Constitution

This is the report of a special committee appointed at the 1951 annual meeting of the Federation. The committee was specifically instructed to sound out the membership regarding the method of amending the Constitution, but the committee regards all matters concerning the Constitution as material germane to this report.. It has circularized the membership in an attempt to sound out sentiment within the various member Societies, but the response to circularization was sparse and limited.

MUST BE FLEXIBLE DOCUMENT

The Committee on Constitution agrees with the overwhelming majority of those who have expressed any opinion on the subject that the Constitution must be kept a highly flexible document. It agrees, further, that too frequent amendment, especially in the middle of the year, should be as unnecessary as it is undesirable.

In view of the wide geographical distribution of membership, and the improbability that every Society can be fully and adequately represented in person at most meetings (including the annual meetings), we can see no practical escape from retaining the proxy system of mail voting (where necessary) both at annual and at interim meetings.

Experience has proved, however, that it is highly desirable that the directors should be fully informed about the matters on which they are requested to vote—and that the opposition to any proposal must be given as much of an opportunity to express opinions and viewpoints to the directors as the officers or the proponents. In event of a mail vote on any proposal at a meeting other than an annual meeting, it is important that:

1. The privilege of unlimited circularization through an always neutral secretary-treasurer at the Federation's expense be extended to the opposition to any proposal as well as to the proponents.
2. No vote for or against a proposal be accepted by the secretary-treasurer until at least 45 days after the first proposal is made.
3. The person or officer making a proposal to be voted on provide, through the secretary-treasurer, complete and detailed written material stating why the proposal is being made and why it is necessary or desirable to obtain approval thereof in advance of a regular annual meeting.

In practice, as we gain experience, we have been making progress toward better-informed mail votes, but we need to make more progress, particularly in opening the way for debate on mail proposals.

We are disinclined to write these recommendations into the Constitution except in setting up machinery to admit new Societies and to amend the Constitution.

It seems to us that the secretary-treasurer should be custodian of this new tradition, and that the secretary-treasurer (so long as he holds the office) should be neutral in both theory and fact in all controversial matters.

SPECIFIC RECOMMENDATIONS

In our opinion, no changes should be made in Article 1 or Article 2.

RECOMMENDATION 1

In accordance with the ideas presented in the introduction to this report, we suggest that the following be substituted for the present Article 3, which has to do with the admission of new Societies into the National Federation:

Article Three

Section 1. Subject to the conditions of this Article, any duly constituted Society of financial and security analysts may be admitted to membership on favorable vote of 75% of the Directors, voting through signed ballots either in person or by mail.

Section 2. Each application of a Society for membership after the approval of this Section shall be accomplished by (*a*) copies of the applicant Society's Constitution and By-Laws (*b*) a brief history of the organization, together with a statement of its current activities, (*c*) a complete roster of its members and their occupations, and (*d*) payment of one year's dues in advance.

Section 3. The application shall be made to the Secretary-Treasurer and referred by him within seven (7) days to the Admissions Committee for approval or disapproval of the President within thirty (30) days. Unless in his judgment further information is required, the President forthwith shall certify the application to the Secretary-Treasurer for submission to the Directors. In a first mailing, each Director shall receive all of the data presented with the application, together with the Admission Committee's report, and shall be given the twenty-one (21) days in which to state his views for or against the application in writing to the Secretary-Treasurer who shall, if requested, forward same immediately to all other Directors.

Forty-five (45) days after the first mailing, the Secretary-Treasurer shall forward official voting ballots in a second mailing to the Directors. If 75% of the Directors return signed ballots indicating approval within thirty (30) days of the second mailing, the applicant Society shall be admitted to the Federation and notified accordingly by the Secretary-Treasurer. If the required approval of 75% of the Directors is not received by the Secretary-Treasurer within the thirty (30) day period, the application shall be regarded as rejected and the applicant Society and Directors shall be so advised.

Section 4. Any application so rejected may be carried to the next Annual Meeting of the Federation for a vote upon the advance written petition of six (6) Directors.

RECOMMENDATION 2

We recommend changing Article 5, Section 1, to read as follows:

Article Five

Section 1. There shall be established the following permanent committees:

(*a*) Placement.
(*b*) Professional Ethics and Standards.
(*c*) Education and Training Program.
(*d*) Corporate Information.
(*e*) Speakers Bureau.
(*f*) Admission of New Societies to Federation.
(*g*) Publication of Annual Directory.
(*h*) Other Committees as Designated by the President.

The purpose of the above amendment is (*a*) to implement the new machinery for admission of new Societies as proposed above, and (*b*) to put the full authority of the National Federation back of the project to publish each year an annual Directory of Members.

RECOMMENDATION 3

Article 6 deals with dues and assessments. One of the now well-established projects of the National Federation is the Annual Directory. We think it should be written clearly into the Constitution that each member Society obligates itself to pay its pro-rata share of the cost of this useful book. Hence, we propose that Section 2 (a new section) be added to Article 6 and that it read as follows:

Article Six

Section 2. Each Society shall be required to submit its list of members and their business affiliation for publication in the annual Directory of Memberships and to contribute its proportionate share of the annual cost of the Directory.

RECOMMENDATION 4

The following is our answer to the problem of amending the Constitution. It seeks to retain the institution of mail voting but to safeguard assurance of adequate opportunity for careful consideration and debate. We would substitute the following for the existing Article 8:

Article Eight

Section 1. Subject to the conditions of this Article, an amendment to the Constitution may be made upon written approval of 75% of the Directors.

Section 2. A proposed amendment shall be sponsored by two or more Directors representing a minimum of two separate Societies and made in writing to the Secretary-Treasurer.

Section 3. Not later than (7) days after its receipt, copies of a duly proposed amendment shall be mailed by the Secretary-Treasurer to the Directors for their consideration and investigation for a period of twenty-one (21) days. During this period any Director or Officer may submit his views for or against the proposed amendment in writing to the Secretary-Treasurer who shall, if requested, forward same to all other Directors and Officers of the Federation.

Forty-five (45) days after the first mailing, the Secretary-Treasurer shall forward official voting ballots in a second mailing to the Directors. If 75% of the Directors return signed ballots of approval within thirty (30) days of the second mailing, the amendment shall be adopted and the Directors notified in writing. If the required approval of 75% of the Directors is not received by the Secretary-Treasurer within the 30 day period, the amendment shall fail of adoption and the Directors shall be so advised.

Section 4. Proposed amendments failing to obtain the required approval of the Directors may be carried by the sponsors to the next Annuel Meeting for a vote.

RECOMMENDATION 5

The resolution establishing the present Committee on Constitution required the committee to report in writing 30 days before the next annual meeting, which instruction we are carrying out in the report.

We assume it was the intent of the 1951 annual meeting to have the 1952 annual meeting act on this report.

With that purpose in mind, we wish formally to place the above recommendations before the 1952 annual meeting as amendments to the Constitution to be voted on at the San Francisco session scheduled for May 4, 1952, at the Fairmont Hotel.

We have, therefore, asked the secretary-treasurer to mail a copy of this report to each director, vice-president, or other officer of the National Federation of Financial Analysts Societies not later than April 4, 1952, and to ask each director either to come to the annual meeting prepared to vote on these proposals or to forward a proxy to said annual meeting in order that his vote may be recorded. It is understood, of course, that the annual meeting may, in its wisdom, amend the wording of these proposed amendments and that it may enact some and reject others.

The Constitution Committee naturally has disagreed on some details, but by compromise and negotiation we are able to present a unanimous report except in one detail.

Mr. Bretey wishes to question the wisdom of continuing to require the approval of 75% of the directors to admit a Society or amend the Constitution. Instead, he would make it 75% *of those voting*. In support of this attitude he says, in part:

> Admittedly there are abuses in mail voting, but, if you surround that voting with such safeguards as apparently you have in your suggestions, it would seem to me that the purpose of what you have in mind is defeated. The educational process is not likely to be so large as you intimate since the tenure of office is for only one year, and there is relative indifference on the part of many of the Federation's directors.
>
> Because of this indifference, if there are to be safeguards such as you outline, *then I would suggest a "Section 77" procedure. I would not say 75% of all directors, but 75% of all directors voting.* I have been in railroad reorganization work long enough to know that that is the only practical way to achieve desired results. In other words, those interested will vote; those not interested will let the matter slide.

With this reservation, Mr. Bretey is signing the report.

OFFER AMENDMENTS FOR ADOPTION

We shall offer these proposed amendments for adoption at the annual meeting of the Federation, to be held at the Fairmont Hotel in San Francisco on the evening of May 4, 1952.

Respectfully submitted,

LUCIEN O. HOOPER, *Chairman*
PIERRE R. BRETEY
RICHARD W. LAMBOURNE

Committee on Education and Training

Despite the fact that this Committee was one of the earliest established by the National Federation, its progress as a liaison organization has been rather limited. Undoubtedly the major reason for this has been the fact that educational and training activities in most Societies are carried on by individuals acting independently, rather than as an organized effort of the Society itself. Although this may be regrettable from the standpoint of obtaining information on educational work accomplished within member cities, it certainly does not mean that no progress is being made in training future analysts.

THE NEW YORK SOCIETY

Perhaps the best example of what I mean is in New York, our largest Society. This Society has no standing committee on education as such; however, a great many of its members have long been associated with education in the field of security analysis. Their close affiliation with the New York Institute of Finance (formerly the New York Stock Exchange Institute) is well known. Regular instructors at the Institute include past Presidents Joseph M. Galanis, Pierre Bretey, and John Spurdle. The director of the Institute, Albert P. Squier, is also a member of the New York Society. In addition to these men, at least a score of other men are regular or guest lecturers at the Institute. Members of the Society also teach similar courses at Columbia University, New York University, Pace Institute, and the American Institute of Banking.

No discussion of the New York Society's work in the field of education would be complete without mentioning the tremendous contribution to the profession made by such authors as Benjamin Graham, David Dodd, and Charles Tatham. Graham and Dodd's *Security Analysis* is, of course, the most widely used textbook in business schools throughout the country.

THE BOSTON SOCIETY

The Boston Society makes its contribution to education and training through a formal standing committee. This committee was originally set up in 1947. It is responsible for the operation of courses in applied security analysis in Northeastern University and Boston University evening schools. The courses at both schools carry full degree credits, both undergraduate and graduate. The courses are staffed entirely by Society members selected by the committee. Some 280 students have taken the courses at the two schools. It has virtually become standard operating procedure for financial institutions to send their trainees to one or the other of these two courses.

Many Societies not only include college and university instructors on their list of those eligible for membership, but also actually make sincere efforts to have these important representatives of the financial community enrolled. By participation in the activities of the security analysts, these instructors are able to convey more clearly to their students the practical requirements and methods generally used. Such teaching members often call on analysts to give special talks to their classes. This approach is one particularly suited to the smaller Societies where the membership may not include a sufficient number of industry specialists to present a complete diversified course.

SAN FRANCISCO SOCIETY

Our new President, Dick Lambourne, a past chairman of the National Federation's Educational Committee, has been actively teaching security analysis at the Stanford Graduate School of Business for some time. Charles C. Clarke and Howard Tharsing are also doing educational work in the San Francisco area. Under the leadership of Dick Lambourne, the San Francisco Society co-operated with the San Francisco Stock Exchange in preparing an educational bulletin on securities.

In furtherance of the San Francisco Society's work with students, some 75 Bay Area young college men were invited to attend forum discussions at the National Federation Convention in San Francisco. I believe this is the first time that such an invitation has been extended at a national or regional meeting. The experiment was most successful. I recommend that all Societies consider a similar move either at special meetings or when a subject of broad general interest is being discussed at a regular meeting.

Respectfully submitted,

GEORGE M. HANSEN, *Chairman*

Admissions Committee

As a result of the discussion at the directors' meeting held in New York on March 6, 1951, concerning the desirability of establishing definite standards to govern admission of additional Societies into the National Federation, the President was directed to appoint a committee to explore the subject and report at the annual meeting. The discussion at the last directors' meeting arose in part from the objections raised by certain directors who had been asked in a mail ballot to approve admission of a Society without supporting evidence concerning the qualifications of the applicant Society.

It seems clear that the National Federation and its officers should not attempt to dictate the internal affairs of the individual Societies composing the Federation. At the time of the establishment of the National Federation, the possibility of such assumption of power was a very live issue and received much attention. The importance of not encroaching on the prerogatives of the individual Societies was recognized in Article I, Section 1, of the Constitution of the National Federation, which states that "this is an organization of autonomous Societies." Although it would not seem proper to attempt to dictate the qualifications for membership in individual Societies, it seems equally clear that we do have the privilege as well as the obligation to maintain the stature of the National Federation. In this respect your committee feels that, if we are to carry out the object of the Federation, as stated in the Constitution, "to promote the welfare of the profession and its members," we must not admit other than bona fide investment analyst groups to membership in the National Federation. On the other hand, promotion of the best interests of the National Federation would seem to envisage growth and extension of membership over as wide a range as possible.

The professional standing and stature of the investment analyst might ultimately be better furthered through the issuance of a certificate by the National Federation to the individual recognizing him as a qualified analyst such as is now done by many other professional Societies.

Although it is recognized that the wide geographical distribution of members of the Society reduces the effectiveness of committee operation, it is recommended that the Constitution be amended so as to provide for an Admissions Committee. In order to increase the possibility of knowledge of the operation of any new Society requesting admission to the National Federation, a wide geographical distribution of its membership would seem desirable. The Admissions Committee might be designated as including five vice-presidents of the Federation and the executive vice-president as chairman.

The applicant Society should be required to provide the following information to the secretary-treasurer of the National Federation:

1. A copy of the Constitution and by-laws of the applicant Society.
2. A list of the officers and members together with their business affiliations.
3. A breakdown of the membership so as to indicate the proportion of members engaged in economic and security analysis and portfolio supervision and, on the other hand, those engaged primarily in other activities.
4. The application should be accompanied by a memorandum from a member of the National Federation, preferably a director, sponsoring the new Society. This sponsoring member should be personally known to one or more of the principals of the applicant Society and be in a position to vouch for the seriousness of their interest in the investment field.

It should then become the responsibility of the secretary-treasurer to forward such application and supporting information to the members of the Admissions Committee. After an appropriate lapse of time, the report of the Admissions Committee, together with all the data, should be forwarded by the secretary-treasurer to each director for consideration prior to vote.

If this information were to be made available to the directors, it seems reasonable to believe that they would be in a position to gage the qualifications for membership to determine that the interest of the group applying for membership was primarily devoted to investment analysis work and to exercise their best judgment in furthering the work of the National Federation through extension of membership to all bona fide groups applying for such membership. No change in the Constitution provision requiring affirmative vote of 75% of the directors for admission would seem required. If circumstances were such that a mail ballot seemed preferable, there would seem to be no particular reason why this would not be a satisfactory means of polling the directors, provided the information regarding the Society and its officers was circulated together with the afore-said memorandum from a member of the National Federation, in sufficient detail to permit adequate appraisal.

Unfortunately experience has indicated that some directors do not take their duties as seriously as others. It therefore would seem desirable to establish definite time limits as a constitutional provision in the event of a mail ballot. On receipt of the application, the secretary-treasurer should be granted 15 days within which to process this material and forward to the Admissions Committee, who could be given 30 days for preparing their report. The directors might well be given 45 days within which to consider the information sent to them and the report of the Admissions Committee, after which the secretary-treasurer should send out ballots returnable within 30 days.

Respectfully submitted,

M. DUTTON MOREHOUSE, *Chairman*
HERBERT B. DRAKE
W. TRUSLOW HYDE, JR.
GEORGE M. SHANNON
MORTON SMITH

Placement Committee

The Placement Committee of the National Federation of Financial Analysts can report a moderately successful year. During 1951–52 a solid foundation has been laid for future constructive activities. Employment in locales different from the places of their activities has been found for seven analysts, all at increased salaries. It seems that Texas continues to offer the greatest lure.

Since jobs have been plentiful in most large cities, the employment services of the affiliated Societies have had no difficult task in this part of their work. Notable cooperation and interest came from Robert Coltman of Philadelphia. To all committee members who have given so freely of their time and effort we owe our deep gratitude. For no organization is better than the services it renders its members.

Finding positions for men in cities distant from their own often entails uprooting families and cannot be lightly undertaken. It involves considerable thought. Yet, because some do desire to move, we hope that each Society will continue to give aid in this direction. This is one of the main purposes of this committee and a true service.

Placement committees must not only endeavor to secure remunerative occupations for members of the Federation but also should concern themselves with problems of member betterment of a more serious nature. The building of morale is important. Of deepest significance to analysts, whether they be seeking new fields or not, are the present evidences of growing unwillingness on the part of financial organizations to employ men over 45 years of age. This seems to be in large measure due to erroneous ideas concerning pensions. These are for the most part fallacious. Ways exist to avoid employee pension status. Yet this reluctance to employ any but youthful applicants presents far-reaching pernicious problems. There is many a first-grade analyst who may some day be unemployed owing to causes not within his sphere of control. There are times when both departments and brokerage houses themselves can cease to exist, and then with their passing goes the staff.

Thus it is that a properly functioning placement committee must smooth the path of members who find difficulty in securing suitable employment. There must be certainty of income for men who have given years of their lives to fit themselves for their profession. To insure the continuance of the services of security analysts beyond the age of 50 is one of the goals of this committee. Men should have the privilege of working for as many years as they function intelligently. Few fade at 50. To assure them this right to work while their learning and experience will benefit investors is one of the tasks we have set ourselves. No effort will be too great. But to succeed we must depend on your suggestions and help. Please give us your assistance.

HELEN SLADE, *Chairman*

Committee on Professional Ethics and Standards

It is the function of this Committee (*a*) to inform the Federation what has been done by the member Societies in the fields of ethics and standards during the past year, (*b*) to express opinions regarding these activities and their aims, and (*c*) to make recommendations both to the Federation and to the member Societies.

Last year the Committee discussed in considerable detail the plans under incubation at that time toward establishing higher professional standards in the field of security analysis. Since that time much spade work has been done by the New York Society of Security Analysts toward a practical approach to accomplish this purpose.

The standards and ethics committee of the New York Society of Security Analysts, under the chairmanship of Mr. Walter A. Gutman, considered the question of standards of the profession in a number of meetings over a period of eighteen months, and late last year submitted a program to the executive committee of the Society. The executive committee considered and approved in principle the advisability of recommending the adoption of such a program, and sent a questionnaire to the membership of the Society in February of this year, which gave the members an opportunity to submit suggestions for changes in the program and to voice approval or opposition.

RESPONSE TO QUESTIONNAIRE FAVORABLE

The response to this questionnaire was favorable, with a considerable portion of the total membership responding, and a very high percentage of the members approving the idea of a program as a proper and worth-while objective.

This means that during the past year the membership of the largest individual Society of the security analysts has gone on record favoring the establishment of a voluntary program to increase the professional standing of qualified security analysts, and to raise the requirements for those who enter the profession at a future date.

The questionnaires returned suggested a number of revisions in the proposal of the standards committee and, as a result, the standards committee submitted a revised proposal to the executive committee of the New York Society on April 9, 1952. We are enclosing a copy of the revised outline of the chartered security analysts' program and the revised administrative procedure.

OUTSTANDING DEVELOPMENT DURING YEAR

These practical steps by the New York Society of Security Analysts toward the adoption of such a program undoubtedly is the outstanding development to be considered by the Standards and Ethics Committee of the National Federation during the year. The Committee has therefore contacted the President of each one of the member Societies, in addition to the Committee members, to determine their general attitude toward the program of the New York Society. The original proposals, including the proposed administrative procedure, were submitted for criticism. Unfortunately, the revised program could not be sent because of the lack of time.

REPLIES FROM 9 SOCIETIES

The Committee received replies from the officers of nine member Societies, in addition to the replies from Committee members, and every one of the replies favored the establishment of a program along the lines suggested. (The Societies include Boston, Chicago, Cleveland, Detroit, Los Angeles, Philadelphia, Richmond, and San Francisco.) A number of suggestions were made. In several cases it was suggested that the requirements necessary to become a "chartered security analyst" should be amplified and made stricter some time in the future. For example, Mr. George M. Hansen of the Boston Society stated: "I have, of course, previously read over the recommendations enclosed in your letter. My reaction is generally favorable. I certainly agree with the objectives and see nothing that should raise serious objections. If anything, the 'tests' appear to me rather on the 'considerate' side. If I were to study the recommendations with the view of developing counter-proposals, I feel reasonably sure the latter would lean toward 'tightening up'."

A NATIONAL PROGRAM

Several suggestions emphasized the importance of making this a national program rather than a program of an individual Society. For example, Mr. Walter Podolak of the Los Angeles Society stated: "One comment I have to make is that I do not believe the term CSA should be given by just one Society but should be an honor conferred by the National Federation. I believe steps should be taken to make this an activity of the National Federation and make the term CSA a designation issued by the National Federation rather than by just the New York Society or any other individual Society." And Mr. Hollister Schenck of the Richmond Society stated: "As for the administration of the program, I am inclined to believe that some sort of a 'board' should be established composed of representatives of all of the Societies which would have the authority to pass on the qualifications of an applicant." Mr. George M. Hansen of the Boston Society stated: "I do, of course, feel that the value of any such program is greatly reduced if done on an individual Society basis. I believe the only way to handle it is to have a National Federation Committee pick up these recommendations and, if they feel so inclined, strengthen them and have them put to a vote of the individual Societies. Thus, they could either be adopted or not acted on. This would make for uniformity and avoid subsequent conflict."

BROADER EDUCATIONAL PROGRAM

Another suggestion of interest was that the establishment of such a program might lead to a broader educational program for analysts. Mr. George W. Blauvelt of the Cleveland Society stated: "Incidentally, it also has seemed to me that perhaps a concomitant development might lead into a more definite educational curriculum for analysts so that those entering this field might come better prepared with the tools of the trade."

AN ADVERSE REACTION

One of the slightly adverse reactions to the program came from Mr. Blauvelt in the following words: "I have talked about this matter with the executive committee of our Cleveland Society of Security Analysts, and it was the judgment of our group, at my suggestion, that we would try to find two or three of our members whose job it would be to follow along and observe the results of the New York move. I might say that I rather gathered that my own interest in the belief and the desirability of some such program was rather greater than that of the other members of our committee."

Mr. Trapnell of the Philadelphia Society is in favor of the objectives of the program but is not favorably inclined toward the procedure suggested. He suggests that the definition of a security analyst should be spelt out in detail, and that the administration of the program might well be carried out by an educational institution, such as the New York University school of business administration, with the collaboration of a board or committee from the Society rather than by the Society itself, since, in his opinion, self-administration in a program of this kind is not desirable. He also has reservations with respect to the Society setting itself up to confer a "degree." He suggests that perhaps a plan might be worked out by which colleges might grant a certificate to those meeting certain minimum qualifications.

OPINIONS REGARDING PROGRAM

Two of the members of the Standards and Ethics Committee of the National Federation expressed some definite and interesting opinions regarding the program. Mr. William W. Wolbach of the Boston Society had the following reaction:

> As a general proposition, I am in favor of the New York Society's objectives and recommendations. However, the matter is highly controversial, and there are some obvious gaps in the New York program.
>
> If the degree is to have any meaning, the program should be administered on a national basis rather than being purely the creature of the New York Society. Otherwise some Society could theoretically award the title to anyone who had been an analyst for two days and could pass a test in adding up to ten.
>
> If the title of CSA is to have any true value, ethics as well as qualifications should be under control, as is the case with other professional Societies. Otherwise, it would be possible for a Canadian bucket shop mining stock operator to hire a CSA just as they now employ alleged mining engineers. There are other obvious opportunities for abuse.

I think the idea is worth study, discussion, and eventual adoption. To have any true significance, it should be done on a national basis. Therefore, New York should be encouraged to withhold action and let the National Federation come up with a program which individual member Societies could either accept or reject."

LEGAL STANDING IN CALIFORNIA

Mr. Lewis B. Reynolds of San Francisco made a number of interesting observations:

> In the first place, it appears to me that no consideration whatever has been given to the legal standing of these proposals, certainly as far as the state of California is concerned and also I believe with respect to certain other states.
>
> The proposal to have the National Federation, or member Societies, issue certificates qualifying recipients as Certified Security Analysts or CSA constitutes in effect the granting of a degree or a professional certificate. Any organization in this state that attempted to grant a degree without first securing a charter from the state empowering it to do so (and there are prerequisites to obtaining such a charter) would be in legal difficulties. The state educational authorities here are very jealous of any attempt to infringe on what they consider their prerogatives without what they consider full compliance with the spirit as well as the letter of the statutes relating to educational institutions.
>
> To cite what may seem to you a rather far-fetched example but nevertheless one that has a direct bearing on the subject, no person may practice as a chiropractor in California without being licensed by the State Board of Chiropractors. Unless he is so licensed, I am informed that no chiropractor may even legally use the letters D. C. after his name in any professional or public communication in this State.
>
> Though I am not an attorney, I do not believe it would be legal for any person in California to use the designation you

> suggest (or any variation of it which might have the same general tenor) unless:
>
> 1. The designation had been granted by a duly chartered educational institution empowered to grant degrees or certificates of graduation.
>
> 2. The designation for such individual had been specifically granted by a state professional board, duly constituted under the laws of the state of California.
>
> Entirely aside from the legal aspects, I personally would be opposed to the use of the term "Certified" under any circumstances even if it was legal. The proposed designation is apparently patterned after "Certified Public Accountant." However, there is a tremendous difference between the two callings.
>
> A security analyst primarily has to do with projection of past experience into the future, and it seems to me an impossible thing to certify to any person's judgment about the course of future events. The proposed designation, as stated in the letter, is to give increased professional standing and would be intended for its effect on the public. I think it would be most unfortunate if the organization should attempt to give the impression that it can certify in advance the investment judgment of any individual. I am sure that you know of professional analysts, thoroughly experienced and of the highest integrity, who have made serious errors in their judgment of the future courses of security prices—and I am equally sure in specific instances that clients would regard such judgments as nothing less than deplorable. If a designation is to be granted, I do not think "Certified" or any equivalent should be part of it.
>
> The question comes to my mind of just how the organization is going to define "three years' (or ten years' or any other period) experience as a practicing security analyst."

Mr. Reynolds goes on to say: "I hope you will not think from the foregoing that I am opposed to improved standards. I am definitely in favor of better standards, but I am very much afraid that the proposed program, if adopted, would not only lead to legal difficulties but might very well also put the organization and its members in a bad light with the public if such ensuing legal difficulties resulted in general newspaper attention."

It is clear to the Committee from this survey that the members of the National Federation of Security Analysts are, as far as can be determined on the basis of the replies made, in favor of a program to increase the professional standing of security analysts and raise the requirements for the profession. It is also clear that there is a feeling that this should be done on a national basis rather than on a basis of each individual Society having its own program which may differ substantially from those of other Societies. Finally, there are a number of questions concerning the method of approach of administrative procedure as outlined in the program of the New York Society.

JUSTIFIES A RECOMMENDATION

This Committee believes that the general approval of a program indicated by the response of the New York Society, and of the officers of individual member Societies, justifies a recommendation to the National Federation and to the member Societies that a program be carried forward that will accomplish the aim as outlined by the executive committee of the New York Society in their letter to members of February 18, 1952, namely:

(*a*) Give increased professional standing to presently qualified security analysts.

(*b*) Raise the requirements for those who enter the profession of security analysts at a future date.

The Committee of Standards and Ethics also recommends that the National Federation appoint a Committee with the objective of working with the New York Society and other member Societies toward the aim of insuring that such a program will be reasonably uniform in methods of procedure and administration for all member Societies.

The Standards and Ethics Committee realizes that it may be difficult to formulate a program that will meet the desires and requirements of each member Society. Nevertheless, inasmuch as the interests of all groups of security analysts throughout the country are involved, it appears highly desirable that a great deal of attention should be given to this problem on a national rather than a sectional basis.

RAGNAR D. NAESS, *Chairman*
ALBERT Y. BINGHAM
LUCIEN HOOPER
A. MOYER KULP
LOUIS R. REYNOLDS
WILLIAM WOLBACH

Speakers Bureau Committee

The Speakers Bureau Committee recommends that the primary responsibility for securing speakers and arranging programs continues to rest with the individual Societies. However, they believe that the Speakers Bureau Committee can and should assist the individual Societies by functioning as an up-to-date source of information on speakers that have been secured by the other Societies. The most practical method of effecting this assistance and the procedure recommended by the Bureau is for officers of the local Societies to be charged with the responsibility of supplying the chairman of the National Federation Speakers Bureau Committee with the schedule of speakers as far in advance as possible. The information would then be duplicated and forwarded to those other Societies who were cooperating. On an informal and irregular basis, this exchange of schedules was tried out in the past year by the Boston, Chicago, and Cleveland Societies with favorable results. The proposal would involve only a nominal expense for the National Federation, and the work required appears no more than it is reasonable to expect the Speakers Bureau Committee to accept.

The Speakers Bureau Committee investigated the possibility of issuing qualitative ratings on speakers appearing before the individual Societies. It considers this unwise and recommends against its adoption.

Fourth Annual Report of Committee on Corporate Information

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EDWARD M. SPENCER
Detroit Edison Company
Detroit

KENNARD WOODWORTH
Eaton & Howard
Boston

The fourth annual report of the Committee on Corporate Information of The National Federation of Financial Analysts Societies is submitted herewith:

The membership of the Committee remained unchanged during the year except that Mr. A. W. Gregory, Jr., of Hartford took the place of Mr. Barnard Flaxman of the same city, and Benjamin Graham succeeded Kennard Woodworth as chairman. (Mr. E. Linwood Savage has been appointed chairman of the Committee effective June 1, 1952.)

During the year the Committee operated on a double front—the first representing a concerted attack on general problems of corporate reporting, the second representing intensive studies of individual industries carried on by members of the Committee and their associates.

GENERAL RECOMMENDATIONS OF THE COMMITTEE

Corporate reports may be improved in general by supplying certain important items and information which, for the most part, do not now appear in annual reports. The items referred to are the following:

1. The excess profit tax credit, stated in terms of earnings per share of common stock.
2. The insurance value—or other current value figure—of fixed assets excluding land.
3. The FIFO value of LIFO inventory, and the per cent of total inventory carried on a LIFO basis.
4. The amount of rentals paid, as shown on the annual report form 10K to the SEC.
5. The amount of income on which income tax was computed and an explanation of any significant differences between income for tax purposes and income as reported to stockholders. In addition, the amount of Federal income tax and Federal excess profit tax should be stated as separate items.

The Committee further recommends to corporations that five-year or longer summaries of financial data be included in annual reports and that the accompanying president's statement or letter to the stockholders carry a specific date.

STUDIES AND RECOMMENDATIONS RELATING TO SPECIFIC INDUSTRIES

In previous years detailed studies have been made by subcommittees covering the adequacy of annual reporting in the chemical industry and in the paper industry. These studies have been published in full as part of the annual reports of this Committee. During the past year a similar study has been completed under the direction of E. Linwood Savage, Jr., covering the 1951 annual reports of commercial banks and trust companies. The full Committee has approved the following findings made in Mr. Savage's report and includes these findings formally in its own recommendations to the National Federation:

6. Reports of commercial banks to their stockholders should be improved so as to indicate clearly the capital funds at statement date, changes in capital funds during the period covered, and operating earnings after income taxes applicable to operating earnings. The balance sheet or notes thereto should disclose the basis of valuation of all assets including the amount and character of reserves deducted from them and the character of reserves appearing as liabilities. In order to report properly changes in capital funds, a complete reconciliation of debits and credits to capital fund accounts and true reserves should be provided. The income account should include recurring income and expense items only, and the income taxes deducted in arriving at net operating earnings should be applicable to these items only. Nonrecurring items such as profits and losses on investments, charge-offs, and recoveries should be reported as nonoperating items against which the income taxes or tax savings related to them should be shown.

SUBJECT OF CONSIDERABLE DISCUSSION

The reports of insurance companies to their stockholders have been the subject of considerable discussion within the Committee. The following recommendation is made with respect thereto:

7. Fire and casualty insurance companies should adopt uniform and consistent methods of presenting their accounts, and agree on a careful and uniform terminology so that one company can readily be compared with the other. In particular, the accounts of fire and casualty insurance companies should be presented in a form that will indicate clearly the true earnings for the year and the true equity of the stockholders at the end of the year, with proper recognition of their interest in the unearned premium reserve less income tax related thereto.

A subcommittee headed by Edward M. Spencer has been engaged during the year in an intensive study of the annual reports of the electric utility industry. Much material has been gathered and discussed. It is expected that the public utility study will be ready for inclusion in the next annual report of this Committee.

PRACTICAL ACTION AND PRACTICAL RESULTS

There are signs that the work of our Committee has not been without influence on reporting practices in the industries studied. Improvement has been noted in reports in the chemical industry (particularly by Commercial Solvents in 1951) and in the paper industry. The recent change in the form of the report of Bankers Trust Company of New York encourages us to hope for definite improvement in bank reports generally.

By its approval of this and previous annual reports of our Committee, the directors of the National Federation will have adopted our recommendations as part of a stated policy of the Federation and its associated Societies. The Committee intends to consider methods of implementing its recommendations along the following lines, among others:

(a) By a check of companies in various industries to determine the extent to which they are prepared to comply with the recommendations adopted by the National Federation.

(b) By inviting members of the constituent Societies to use the services of this Committee in requesting information, in the recommended categories, not now included in a particular corporation's report. Such requests emanating from our Committee, with the authority of the National Federation behind them, will, we hope, produce concrete and beneficial results.

The Committee welcomes suggestions from members of the constituent Societies on matters within its field of activities.

May 1952

Preliminary Draft

The Committee has considered various suggestions from its members and others made during the year and has agreed on the following recommendations to the board of directors of the Federation:

That the Federation place itself on record, through the vote of its board of directors as requesting all corporations to supply information on the following five points:

1. The excess profit tax credit, stated in terms of earnings per share of common stock before excess profit tax accrues.

2. The insurance value—or other current value figure—of fixed assets.

3. The FIFO value of LIFO inventory, and the per cent of total inventory carried on a LIFO basis.

4. The amount of rentals paid, as shown on the annual report form 10K to the SEC.

5. The amount of income on which income tax was computed and an explanation of any significant differences between income for tax purposes and income as reported to stockholders.

Such information should preferably be included in the annual reports as published, but in any event it should be made available to an accredited security analyst on request.

The Committee further suggests that fire and casualty insurance companies be requested to improve the form of their reports to their stockholders so that the stockholders will be advised directly of the true operating results for the year and the net asset value at the close of the year. In effect this recommendation implies that the now established forms of analysis of insurance company earnings and net asset values be applied by the companies themselves in reports to stockholders so that the latter will not need the aid of statistical services in order to determine the earnings and asset values of their shares.

The reports of commercial banks to their stockholders should be improved so as to indicate more clearly the basis for carrying marketable securities and the amount and character of reserves against assets.

If the above recommendations are approved by the Federation's directors, the Committee has in mind circularizing a number of representative corporations to determine the extent to which they will be willing to comply with these standards of information.

The Committee assumes it has authority from the board of directors of the Federation to communicate in its name with corporations to request compliance with the standards of corporate information approved by the Federation. The Committee will consider inviting members of the constituent Societies to use our Committee as a means of requesting such information. It may well be that such requests should have behind them the prestige of the entire Federation, acting through its Committee on Corporate Information.

Respectfully submitted,

COMMITTEE ON CORPORATE INFORMATION

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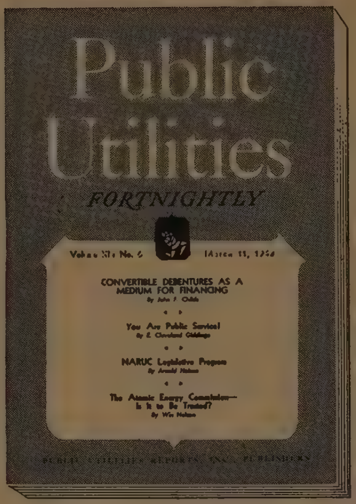

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Financial News and Comment

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Committee Appointments for 1952-53

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Herbert B. Drake, San Francisco
Walter K. Gutman, New York
George M. Shannon, Boston
William C. Trapnell, Philadelphia

Professional Ethics and Standards

A. Moyer Kulp, Philadelphia *(Chairman)*
George R. Berkaw, Jr., Detroit
A. Hamilton Bolton, Montreal
Shelby C. Davis, New York
William P. Held, San Francisco
Ragnar D. Naess, New York
William C. Norby, Chicago
Alfred B. Post, Los Angeles
Herbert C. Wells, Jr., Providence
William W. Wolbach, Boston

Publications

Pierre R. Bretey, New York *(Chairman)*
George W. Blauvelt, Cleveland
Lewis B. Reynolds, San Francisco

Constitution

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Lucien O. Hooper, New York
Richard W. Lambourne, San Francisco

Speakers Bureau

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Jack R. Laznick, Los Angeles
Sidney B. Lurie, New York
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Corporate Information

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Jeremy C. Jenks, New York *(Secretary)*
Gilbert H. Palmer, Cleveland
Edward M. Spencer, Detroit
Glenn M. Trumbo, Chicago
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Kennard Woodworth, Boston

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W. T. Moran, Montreal
Paul A. Murphy, Cleveland
Howard Tharsing, San Francisco
M. H. Waterman, Detroit
James C. Wheat, Jr., Richmond
William Witherspoon, St. Louis

Placement

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Albert P. Drasdo, Los Angeles
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Lawrence M. Goodspeed, Detroit
Frank X. Keaney, St. Louis
Earl F. A. Meyer, Chicago
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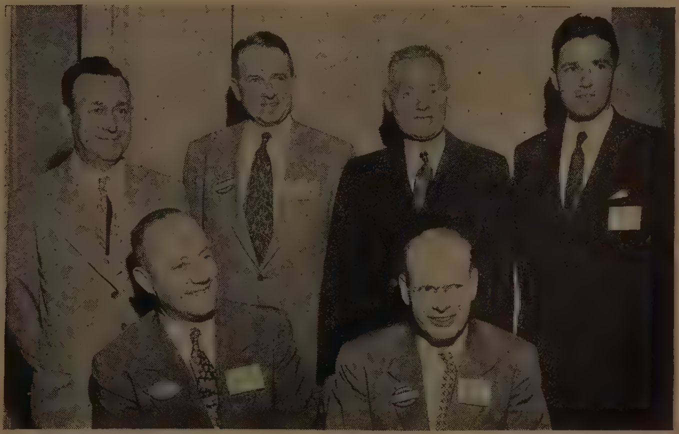

George Shimmon

Past Officers of the Boston Security Analysts Society

Rear row: George M. Shannon, E. Linwood Savage, Kennard Woodworth, John F. Curley

Front row: George M. Hansen, Robert J. Wilkes

Book

In this department are summarized books, articles, and documents of outstanding economic or financial interest. A list of articles, which may be useful to the security analyst, follows the reviews.

Helen Slade is the author of the books reviews. She will co-operate with members of the Society desiring source material for* JOURNAL *articles and for research projects and studies.

BRITISH PLANNING AND NATIONALIZATION

Ben W. Lewis
The Twentieth Century Fund,
313 pp, $3

This detailed book of "British Planning and Nationalization" would be historically important and intellectually consequential under any circumstances. Today's drift into this kind of thinking and performing gives the study extreme significance. Legislation based on uneconomic, unthinking human sympathy may be commendable in itself, but it can "kill the goose that lays the golden egg." The gravity of Britain's effort to bring plenty through controls, how it was undertaken, functioned, and seemingly failed to bring the good life, ought to be appraised by Americans before it is too late.

Some Britons think there are two types of planning: one, totalitarian, subordinates individual wants to state demands—the other, considered Democritic, endeavors to permit personal freedom of choice. This probably means the worker may decide whether or not he labors in one field or another.

Because Britons' existence depends on imports and successfully competing exports, their planning "must be highly flexible." For this reason they endeavor to plan for the future of each industry, and guide the economy as well as allocate scarce materials. In itself this must substantially affect the national economy. Every product is assigned to a "sponsoring" governmental department through whose good offices firms may aspire to secure equipment or materials. Then, too, no issue of securities may be floated without the Capital Issues Committee's consent. The Minister of Works gives building permission; raw materials are apportioned by the ministry or committee in charge of the items involved.

The Government presents programs for controls in its "Economic Survey." This annual report presented every February or March brings into being the plan for the coming year. Committees and representatives do active work under the chairmanship of the "Head Economic Section" and other sections. Any business must have the approval or "active support" of its sponsor, who also gives advice which includes what may or may not be done. Of course the committee men are "experienced in finance and industry." Still they might not be!. This ought all to be in the past tense, since the Labor Government does not rule at the moment, although many of its tenets are still in vogue.

Whether controls be direct or indirect they should not be treated lightly but, writes Mr. Lewis, the indirect ones do not constitute "a strait-jacket." Yet they do seem to be rather restrictive. The amounts of coal taken from British pits under controls must be determined by a committee of colliery owners acting by Parliamentary authority and prices are to be fixed by them. Policies and development operations are part of the board's work. Coal, it was said, did not earn as much as necessary, and required Government aid to increase output. Nationalization of steel came to an industry without any excuse of its being "in distress." This was merely the manifestation of a Labor Government feeling exaltation over its elevation. Shares of eighty large iron and steel companies became Government-owned and operated. All under the direction of a Board of seven members. The ramifications and rules of steel production should be examined. Nationalization of the railroads was glamorized by words like "unification," "co-ordination," and "integration." This apparently entices British transportation men, but it did not bring profits.

Even though the Labor Government is out of power, it seems unlikely that its nationalized industries or the policies that govern them will be entirely cast aside. What is more important is that such a move might become popular in the United States. For this reason Mr. Lewis' book should be first on the list for necessary reading. It is done with complete detail, and in a highly scholarly fashion; moreover, the book is never dull—only frightening.

HOW MUCH GOVERNMENT?

Prepared for the Conference Board by
Martin R. Gainsbrugh
33 pp, $1

Conference Board studies always deal with questions of immediate interest, and this one is no exception. Excellent charts do much to elucidate an important question. It has been the custom of the Board to demonstrate by graphic presentation that which all thinking voters should know. Changes have taken place in Government during the past thirty years, which in many instances altered the entire functioning of our economic system. Just how far we may continue on our path of spending without complete interruption to our manner of living and doing becomes apparent after a careful inspection of Mr. Gainsbrugh's charts and text.

Government spending has cut deeply into individuals' capacity to invest —or consume. "How Much Government?" shows the severity of forced curtailments by individuals caused by taxes, high prices, and the kind of economy under which we now labor and live.

The Government debt has mounted, and at the same time a large part of incomes has been captured by taxes. "The result is that today few areas of social or economic activity remain unaffected by government."

It seems that sources of taxation have changed, for now the Government is turning to levies on income for larger contributions. Up to the present high incomes made taxing more or less simple. Should earnings decline, we might be faced with more levies, and more trouble. The chart concerning size and sources of taxes, indicating the tremendous individual and corporate contribution to Government spending, is disturbing. It seems, too, that much of our tax money is used to pay Government employees. As a purchaser the Government influences output and the price level. Proposed cuts in spending are charted. This study is well worth owning, even though it is terrifying.

FINANCIAL HISTORY OF THE UNITED STATES

Paul Studenski and Herman E. Krooss
McGraw-Hill Book Company,
528 pp, $6.50

There are books one finds that not only are interesting and illuminating but also bring out the wish to read and reread, so that one may understand all they present. Such a study is Mr. Studenski's "Financial History of the United States." Here is shown the growth of American fiscal policies as they altered from one administration to another, according to the changing goals of different leaders.

The portrayal of determining factors which have brought us to the present financial situation is replete with descriptions of tariffs, loans, governmental aims, taxes, and expenditures. Successes and breakdowns are responsible for today's chaotic condition: in these unfoldings are seen the causes for some of the experiments that failed. Not only those of today, but also the deficiencies of the past. Such as the philosophy of Andrew Jackson, the taxing theories of Thomas Jefferson, and the achievements of Alexander Hamilton.

Effects of the worthlessness of paper currency after the early lawmakers enacted price-fixing legislation are startling. "Price inflation became general." In fact, the United States was born in a time of high prices; yet it was not very prosperous. Another era examined is that of the 1860's. After the restoration of peace, the country found itself faced with large Government loans, depreciated paper money, and other difficult issues. Problems of the Government were grave. Moreover, there were large increases in expenditures for public works.

Methods of financing wars are evaluated and compared. The authors conclude that, though the rate at which Government debts of the 1920's were retired was too low, it is not entirely justifiable to ascribe "responsibility for the great debacle of the twenties to the Treasury"; for in that period private speculation mounted and was much to blame. How this slump might have been mitigated is something over which to ponder. In retrospect there seem ways by which the confusion and depression might have been found lessened. Contemplation of the methods—and lack of them—as practiced in the past may lead to finding the means of salvation now; at any rate, basing opinions on the experiences of the past is usually profitable.

Attempts to expand credit in the 1930's is stressed. When in 1932 Congress passed the Glass-Steagall Act, it made possible the use by the Federal Reserve Banks of both commercial paper and Government obligations for collateral for note issues, without fear of "contracting the currency supply." This permitting of a great open market operation increased excess reserves—but not prosperity. After World War II Government policies were sometimes "inconsistent and self-defeating." In a wild rush for security, heavy spending became considered a probable panacea. This proved to be fallacious. Mr. Truman's "Fair Deal" like Mr. Roosevelt's "New Deal" was prolabor and profarmer, but the "Fair Deal" lacked the stamp of intellectualism.

Large expenditures from all sides created, in part, high prices and increased money turnover. The illusion of prosperity brought about by spending, public and private, was soon offset by the rising cost of living. Nineteen-fifty-one was not a high-prosperity year. One highly regarded weapon against inflation, namely, debt retirement, which lasted a scant two years, never brought much comfort. It must be noted that there was no definite rate of retirement set by Congress. Despite all its shortcomings, the story of how this rate of reduction was determined makes interesting reading.

The aim of the authors is to bring enlightenment. This is done by disclosing to the reader an analysis of the financial history of the country in a comprehensive and engaging manner. The book is certainly timely.

INVESTMENTS

David F. Jordon and
Herbert E. Dougall
6th Edition, Prentice Hall,
646 pp, $7.35

When the continuing demand for a book sends it into a sixth edition, one knows there is something extraordinary about it. This latest printing of "Investments" revised by Herbert Dougall carries the solution to problems and makes clear the meanings of what makes a good investment. Not only young and inexperienced analysts but mature students as well will find much to clarify their thinking in both text and tables.

Operations of our banking system, the savings of institutions, as well as the shifts of thinking of modern investors, should make good reading for all and reservoirs of information for persons desiring to understand the financial structure—what it does and how to use it for personal gains.

It is heartening to know that so wise an author thinks there is no danger of debt repudiation in terms of dollars. And disheartening to learn repudiation in terms of "what the dollar will buy" is considered another story.

The section on the youth and old age of a corporation brings the thought: How lasting is a corporation's virility? And, likewise, how many years or months before its worth becomes apparent? Some fine organizations took time to be recognized. The book assists in simplifying this kind of valuation. Then comes the question: Just how long before that appraisal blooms and the shares are adequately valued?

Sources of information are listed, with special stress on Government publications. These books and pamphlets may be had at exceedingly low cost, and one often wonders why so few analysts avail themselves of so real a service performed by the Government.

Recent Books, Documents, and Magazine Articles of Financial Interest*

Economic and Miscellaneous

Basic Issues in Decontrol, Conference Board, June 1952.

Spatial Price Equilibrium and Linear Programming, *American Economic Review,* June 1952.

Toward a Dynamic Theory of the Cycle, *Papers and Proceedings of American Economic Association,* Dec 26—29, 1951.

The Interdependence of Wage and Price Determination in the Regulated Industries, *Proceedings of American Economic Association.*

Now What's a Union Shop?, *Business Week,* June 21, 1952.

Highlights of New Legislation Affecting Business in 1952, *N. Y. State Commerce Review,* N. Y. State Dept of Commerce, Albany, N. Y., May 1952.

A New Approach to Retirement Income, *Journal of Finance,* May 1952

France and North Africa, *Economist,* May 24, 1952.

Implications of Rent Control, *International Labor Review,* April 1952

More Firms Now than before the War, Conference Board, May 1952.

The Taft-Hartley Act and States Rights, *Labor Law Journal,* May 1952.

Government Seizure in Labor Disputes, *Labor Law Journal,* May 1952.

The Wholesale Price Index, *Federal Reserve Bank of N. Y. Monthly Review,* May 1952.

Savings by Individuals, Conference Board, *Road Maps of Industry,* May 1952.

Planning for the Economy during Rearmament and Thereafter, *Planning,* 1951.

Halfway to 1960, *Lloyds Bank Review,* Apr 1952.

The Future of the Small Firm, *Scope,* Apr 1952.

Question-marks over the Budget, *Banker,* Apr 1952.

Facing the Facts in Old-Age Security, *American Economic Security,* Feb 1952.

Monetary and Fiscal Subjects

Inflation and Accounting, *Harvard Business Review,* May-June 1952.

Asset Holdings and Spending Decisions, *Papers and Proceedings of American Economic Association,* Dec 26–29 (Received June 1952).

Proportion of Capital Formation to National Product, *Papers and Proceedings of the American Economic Society,* Dec 26–29, 1951.

Control of Bank Portfolios as an Instrument of Monetary Control, *Papers and Proceedings of American Economic Association,* Dec 26—29, 1951.

The Public Debt and What to Do about It, National Association of Manufacturers, Mar 1952.

Monetary Policy and the Treasury Bill Market, *American Economic Review,* June 1952.

How to Make Your Savings Work for You, School of Business Administration, University of Minnesota, 1951.

How Much Water in Your Ad Budget?, *Printers Ink,* May 23, 1952.

Investment Aspects of the Accumulation of Pension Funds, *Journal of Finance,* May 1952.

Investment Psychology since the Outbreak of War in Korea, *Journal of Finance,* May 1952.

Business Credit Demands in a Defense Period, *Federal Reserve Bulletin,* May 1952.

Can Monetary Policy Carry the Load?, *Bankers,* May 1952.

Sources and Uses of Eighth District Funds, Federal Reserve Bank of St. Louis, May 1952.

Reason in Rents, *Economist,* June 7, 1952.

The Instability of Consumer Spending, National Bureau of Economic Research, May 1952.

The Public Debt and Trust Funds, Federal Reserve Bank of Chicago, *Business Conditions,* May 1952.

The U. S. Gold Hoard: What and Why?, *U. S. News,* May 2, 1952.

Do We Need Price Controls?, *Current History,* May 1952.

What's What in Export-Import Credit?, *Credit and Finance Management,* May 1952.

Devaluation and the Dollar Gap, University of Illinois, *Current Economic Comment,* Feb 1952.

Effects of Recent Credit and Debt Management Policies upon Financial Institutions, *Journal of Finance,* May 1952.

Industrial

The Future of Our National Resources, *Annals of Academy of Political and Social Science,* May 1952.

Cigarette Lineup, *Forbes,* May 15, 1952.

Outlook for Steel and Copper, *Guaranty Survey,* June 1952.

Conservation of Oil and Gas, *Harvard Law Review,* May 1952.

Revenues and Expenses of Railways, *Railway Age* (monthly)

Passenger Traffic Number of *Railway Age,* May 19, 1952.

Distillers Must Widen Market, *Spirits,* May 1952.

Iron and Steel in the Soviet Union, *World Today,* May 1952.

The Dow Expansion, *Fortune,* May 1952.

Trucks Roll the Food to Market, *Cooperative Grain Quarterly,* winter 1951.

Oil in Mississippi, University of Mississippi, Bureau of Business Research.

Agricultural Statistics, U. S. Dept of Agriculture, Supt of Documents, $1.75.

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*All articles and documents listed in this section may be found in the economics division, room 228, of the New York Public Library.

Development of the World Cotton Situation, *Egyptian Cotton Gazette,* Jan 1952.

The Jigsaw Pattern of Wholesale Drug Sales, *Sales Management,* Apr 15, 1952.

Screen Communication in Business Management, *Advanced Management,* Apr 1952.

Textiles Trouble, *Business Week,* Apr 26, 1952.

Tea Industry Problems, *Lloyds Bank Review,* Apr 1952.

Financing the Wool Industry, Robert Morris Associates, Mar 1952.

The Cotton Industry, *Economist,* Apr 5, 1952.

Stop Nations Economic Jag Now (steel), *U. S. Steel Quarterly,* Feb 4, 1952.

Lead: Its History, Uses, and Future Supply Prospects, *Purchasing,* Mar 1952.

Taxes

Ten Years of Total Property Tax Levies in California Counties, *Tax Digest,* Feb 1952.

Practical Limitations of the Federal Net Income Tax, *Journal of Finance,* May 1952

Tax and Expenditure Policy for 1952, Committee for Economic Development, Apr 1952.

Income Tax Accounting, *Savings and Loan Journal,* May 1952.

The Tax Gatherers, *Midland Bank Review,* May 1952.

Tax Institute Symposium, June 15–16, 1952, Effect of rates etc., $5.

The Truth about Profits: Taxes Take Most, *U. S. News,* Apr 25, 1952.

Taxes, All Time High in 1952, *U. S. News,* Apr 25, 1952.

* * *

The Golden Spike

May 10, 1869 . . . workers of the Union Pacific and Central Pacific Railroads gathered at Promontory, Utah, to await the arrival of the officials of the two railroads, the completion of track over the 50-odd-foot gap, and the driving of the Golden Spike.

When the spike had been driven, the Nation's first transcontinental railroad would be completed, the Union would be linked with the Pacific, California and Oregon would be bound to the Union, and travel time from the Atlantic to the Pacific and from England to Australia and the Far East would be shortened.

On the head of the last spike was inscribed the legend: "The Last Spike"; on one side, "The Pacific Railroad; Ground Broken January 8, 1863; completed May 10, 1869"; on another side, "May God continue the unity of our Country as this Railroad unites the two great Oceans of the world"; on the third side, "Presented by David Hewes, San Francisco"; and on the fourth, the names of the company officers.

The Golden Spike was returned to California and today rests in a vault in the Wells Fargo Bank and Union Trust Company in San Francisco.

Admissions to NYSSA Membership

March 20 to July 9, 1952

ARMSTRONG, Robert B., American Enka Corp., 206 Madison Ave., New York
BARRY, David J., Manufacturers Trust Co., 55 Broad St., New York
BAUMAN, John S., Model, Roland & Stone, 120 Broadway, New York
BEAL, David Dean, Baker, Weeks & Harden, 1 Wall St., New York
BENJAMIN, Maurice S., Benjamin Hill & Co., 1 Wall St., New York
BERETZ, O. Paul, W. C. Gilman & Co., 55 Liberty St., New York
BERNSTEIN, Daniel Justin, North American Realty Corp., 745 Fifth Ave., New York
BOUDET, Roger F., Southern Co., 20 Pine St., New York
BRIDGWOOD, John B., Chase National Bank, 11 Broad St., New York
BROOKS, Shelton A., Fahnestock & Co., 65 Broadway, New York
CAMERON, Harold W., Pacific Northwest Co., Terminal Box 3168, Seattle, Wash.
CASTINO, Jack W., F. Eberstadt & Co., 39 Broadway, New York
CATTERTON, David E., Moody's Investors Service, 65 Broadway, New York
CRANE, John E., Moody's Investors Service, 65 Broadway, New York
DANFORTH, Robert S., Goldman, Sachs & Co., 30 Pine St., New York
DE MANDY, Laszlo A., Bear Stearns & Co., 1 Wall St., New York
DOWLING, T. M., Stillman, Maynard & Co., 61 Broadway, New York
DUNZ, Miller J., Chase National Bank, 11 Broad St., New York
FRANKLIN, James P., Niagara Share Corp., 70 Niagara St., Buffalo
FRIEDLANDER, Walter, Lord, Abbett & Co., 63 Wall St., New York
GERLACH, Charles L., Blair, Rollins & Co., 44 Wall St., New York
GLUCKSMAN, Lewis, Steiner, Rouse & Co., 25 Broad St., New York
GOSDORFER (Mrs.) Eugenie K., Riter & Co., 40 Wall St., New York
GREEN, Albert Leslie, Brown Bros. Harriman, 59 Wall St., New York
GRIFFITH, B. Barret, B. Barret Griffith & Co., Broadmoor, Colorado Springs, Colo.
GROGAN, William H., Moody's Investors Service, 65 Broadway, New York
HALL, Frederick Bailey, Laidlaw & Co., 25 Broad St., New York
HAY, William Wren, Hirach & Co., 25 Broad St., New York
HAYDEN, Luke S., Syracuse Savings Bank, 102 N. Salina St., Syracuse
HENLE, Faye (Mrs. Ray Vogel), 65 W. 95 St., New York
HEYES, Fred Lincoln, Brown Bros. Harriman, 59 Wall St., New York
HIND, Alfred S., Wood, Walker & Co., 63 Wall St., New York
KRAUS, Louis J., Burnham & Co., 15 Broad St., New York
KRISKO, Robert S., Fiduciary Trust Co. of N. Y., 1 Wall St., New York
LOOMIS, Fred P., Fred P. Loomis, 1038 Henry Bldg., Seattle, Wash.
LYNCH, Edmund C. Jr., Merrill Lynch, Pierce, Fenner & Beane, 70 Pine St., New York
LYNCH, Thomas J. Jr., Price, McNeal & Co., 165 Broadway, New York
McKENNA, Frank V., Grimm & Co., 44 Wall St., New York
McNIVEN, Richard H., Clark, Dodge & Co., 61 Wall St., New York
McRAE, Roderick, Bank of N. Y., 48 Wall St., New York
MANLY, W. Keyser, Kelly-Manly, Inc., 30 Broad St., New York
MAXWELL, Raymond D., J. R. Trimmins & Co., 61 Broadway, New York
MERKEL, Walter F., Gartley & Associates, 68 Williams St., New York
MERKT, Oswald E., Kidder, Peabody & Co., 17 Wall St., New York
MIDDENDORF, J. William, Wood Struthers & Co., 20 Pine St., New York
MILLER, Thomas E., Hercules Powder Co., Wilmington, Del.
MORGAN, Charles N. Jr., Bache & Co., 36 Wall St., New York
NAESS, Ragnar D., Naess & Thomas, 61 Broadway, New York
PILE, Roger H., Walston, Hoffman & Goodwin, 35 Wall St., New York
PRATT, Eugene J., Niagara Share Corp., 70 Niagara St., Buffalo
ROBERTS, Charles S., 17 E. 42 St., New York
ROGERS, J. A. Courtenay, Union Carbide & Carbon Corp., 30 E. 42 St., New York
ROLL, Edwin D., N. Y. Trust Co., 100 Broadway, New York
SAVAGE, Robert H., Merrill Lynch, Pierce, Fenner & Beane, 70 Pine St., New York
SCHAENEN, Lee, H. C. Wainwright & Co., 30 Pine St., New York
SCHEIDELL, Henrietta V., General Electric Co., 570 Lexington Ave., New York
SHAW, John S. Jr., Ingalls & Snyder, 100 Broadway, New York
SMITH, Romeyn W., Pacific Fire Insurance Co., 12 Gold St., New York
STAPLEY, Charles O., National City Bank of N. Y., 55 Wall St., New York
STONE, Goldie, Hallgarten & Co., 44 Wall St., New York
STOUT, Brevoort, Templeton, Dobbrow & Vance, Box 632, Englewood, N. J.
STRAUSS, Peter, Lehman Bros., 1 William St., New York
WALL, James Philip, E. Lowitz & Co., 29 Broadway, New York
WARREN, Edus Houston Jr., Spencer Trask & Co., 25 Broad St., New York
WEBER, Paul J., Hercules Powder Co., Wilmington, Del.

Luncheon Forum Talks

NEW YORK SOCIETY OF SECURITY ANALYSTS

SINCE MARCH 28, 1952

Date	*Speaker*	*Topic*
Apr 1	G. S. Peppiatt President of corporation	Federal-Mogul Corp.
Apr 2	Paul B. McKee President of company	Pacific Power & Light Co.
Apr 3	Daniel M. Sheehan Vice-president & comptroller of company	Monsanto Chemical Co.
Apr 7	G. J. Hanks President of company	South Penn Oil Co.
Apr 8	Gen. William H. Harrison President of corporation	International Telephone & Telegraph Corp.
Apr 9	Lloyd Halverson Economist, National Grange	Government Farm Program and Farm Income
Apr 10	R. V. Rodman President of corporation	Anderson-Prichard Oil Corp.
Apr 14	E. M. Greer R. P. Lord President and executive vice-president of Greer Hydraulics, Inc.	Hydraulics and Greer Hydraulics
Apr 15	J. H. Coolidge Vice-president and treasurer of corporation	Thompson Products, Inc.
Apr 17	William C. Dabney President of company	Devoe & Raynolds Co.
Apr 18	Patrick B. McGinnis Chairman, Norfolk Southern R.R. Co.; partner, McGinnis & Co.	Proposed Railroad Legislation
Apr 21	Edward Mittleman Vice-president & treasurer of corporation	Hunt Foods, Inc.
Apr 22	J. B. Woodward, Jr. President of company	Newport News Shipbuilding & Dry Dock Co.
Apr 23	James F. Oates, Jr. Chairman of board	Peoples Gas Light & Coke Co.
Apr 24	J. S. Sherer, Jr. President of corporation	Reo Motors, Inc.
Apr 25	Cleve H. Pomeroy President of company	National Malleable & Steel Castings Co.
Apr 28	C. B. Morgan President of company	Rayonier, Inc.
Apr 30	Avery R. Schiller President of company	Public Service Co. of New Hampshire
May 1	Duncan Merriweather Executive vice-president of company	Rohm & Haas Co.
May 12	Robert C. Sprague President of company, chairman of board, Radio-Television Manufacturers Association	Sprague Electric Co.
May 14	Joseph Pursglove, Jr. Vice-president of research & development, Pittsburgh Consolidation Coal Co.	Coal's Problems and Future Possibilities
May 15	Marion B. Folsom Treasurer of company	CED Tax Program & Eastman Kodak
May 19	Irving W. Wilson President of company	Aluminum Co. of America
May 20	George W. Burry President of corporation	Burry Biscuit Corp.
May 23	C. A. Major President of company	Lehigh Valley R.R. Co.
May 26	Charles H. Gueffroy President of company	Portland Gas & Coke Co.
May 27	T. A. Printon President of company	Nopco Chemical Co.

Date	*Speaker*	*Topic*
May 29	F. H. Coughlin President of company	Central Louisiana Electric Co.
June 2	I. J. Karr General manager electronic department, General Electric Corp.	Transistors, Their Significance
June 3	F. B. Ortman President of company	Gladding, McBean Co.
June 4	Henry B. Sargent President of company	Arizona Public Service Co.
June 6	Charles H. Pishny	The Valuation of Oil and Gas Reserves
June 9	Frank F. Kolbe President of company	United Electric Coal Companies
June 10	W. A. Thompson Chairman of board	Seaboard Finance Co.
June 11	Leslie Rice Jack Dougherty	Williston Basin
June 12	J. I. Snyder, Jr. President of company	Pressed Steel Car Co.
June 13	W. A. Grotz President of company	Western Maryland Railway Co.
June 16	R. L. Rosenthal President of company	Citizens Utilities Co.
June 17	A. King McCord President of corporation	Oliver Corp.
June 18	J. F. Merriam President of company	Northern Natural Gas Co.
June 20	H. S. Osborne Chief engineer of company	American Telephone & Telegraph Co., Bell System's Construction Program
June 24	Carl F. Dietz President of corporation	Lamson Corp. of Delaware
June 25	W. W. Townsend Townsend, Skinner & Co.	Outlook for Business and the Bond Market
June 26	John C. Kephart Vice-president, National Chlorophyll Co.	Chlorophyll and Its Potentials
June 30	John Fox President of corporation	Minute Maid Corp.

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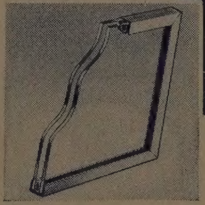

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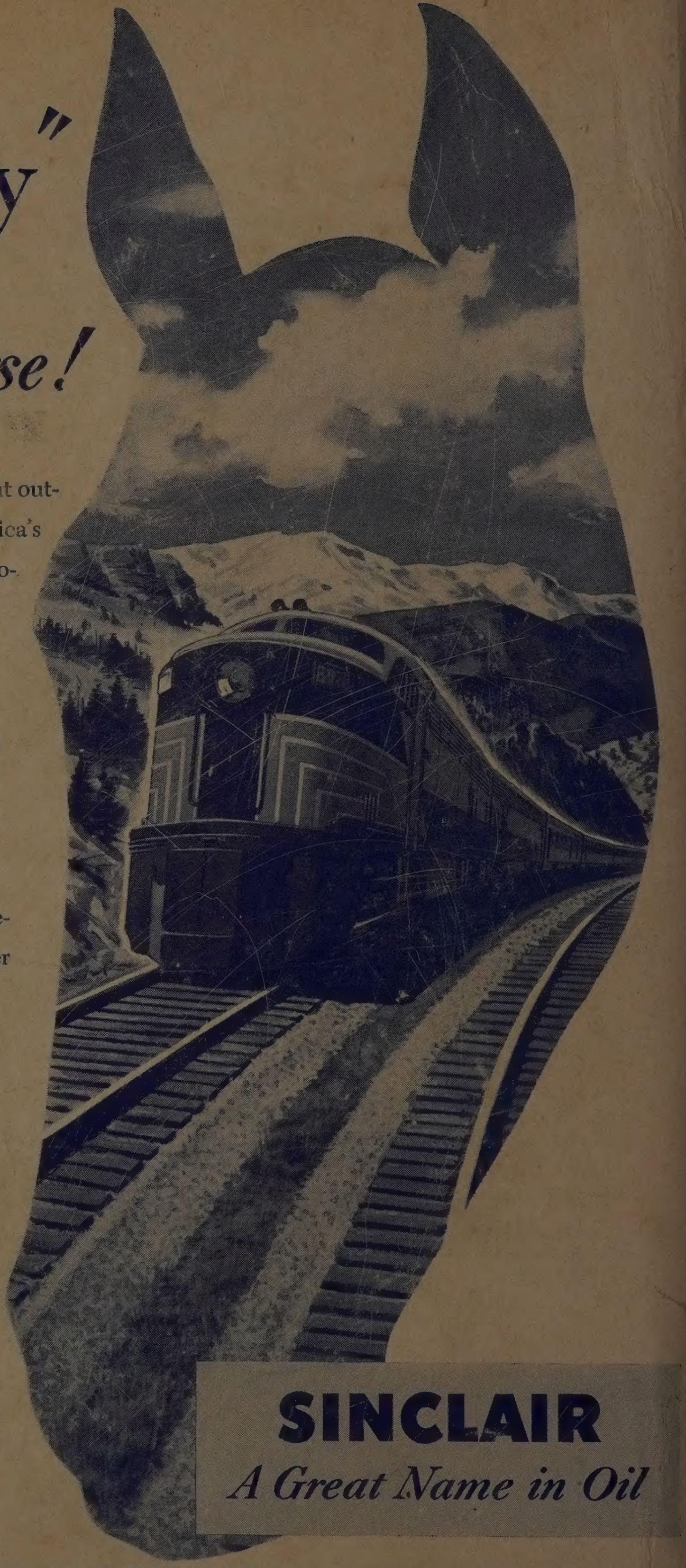
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